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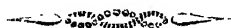
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EDINBURGH REVIEW,

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N^o VII.

ART. I. *Traité de Legislation Civile et Penale ; precedés de Principes Generaux de Legislation, et d'une Vue d'un Corps complet de Droit ; terminés par un Essai sur l'Influence des tems et des lieux relativement aux Loix.* Par M. Jeremie Bentham, Jurisconsulte Anglois. Publiés en Francois par M. Dumont de Geneve, d'après les Manuscrits confiés par l'Auteur. 8vo. 3 tom. Paris, an X. 1802.

THE title-page of this work exhibits a curious instance of the division of labour, and of the combinations that hold together the literary commonwealth of Europe. A living author consents to give his productions to the world in the language of a foreign editor ; and the speculations of an English philosopher are published at Paris under the direction of a *redacteur* from Geneva. This arrangement is not the most obvious or natural in the world ; nor is it very flattering to the literature of this country ; but we have no doubt that it was adopted for sufficient reasons.

It is now about fifteen years since Mr Bentham first announced to the world his design of composing a great work on the principles of morals and legislation. The specimen which he then gave of his plan, and of his abilities, was calculated, we think, to excite considerable expectation and considerable alarm in the reading part of the community. While the author displayed, in many places, great originality and accuracy of thinking, and gave proofs throughout of a very uncommon degree of acuteness and impartiality, it was easy to perceive that he was encumbered with the magnitude of his subject, and that his habits of discussion were but ill adapted to render it popular with the greater part of his readers. Though fully possessed of his subject, he scarcely ever appeared to be master of it, and seemed evidently to move in his new career with great anxiety and great exertion.

alarm is increased by every thing which renders it probable that such acts may be frequently repeated. In one case, and one of considerable atrocity, there is no alarm at all; because the only beings who can be affected by it, are incapable of fear or suspicion—this is the case of infanticide: and Mr Bentham ingeniously observes, that it is probably owing to this circumstance that the laws of many nations have been so extremely indifferent on that subject. In modern Europe, however, he conceives that they are barbarously severe. In the case of crimes against the community, such as misgovernment of all kinds, the danger again is generally infinitely greater than the alarm.

The remedies which law has provided against the mischief of crimes, Mr Bentham says, are of four orders; preventive—repressive—compensatory—or simply penal. Upon the subject of compensation or satisfaction, Mr Bentham is most copious and most original; and under the title of satisfaction in honour, he presents us with a very cool, acute, and judicious inquiry into the effects of duelling, which he represents as the only remedy which the impolicy or impotence of our legislators has left for such offences. We do not think, however, that the same good sense prevails in the sketch which he subjoins of the means that might be employed to punish insults and attacks upon the honour of individuals. According to the enormity of the offence, he is for making the delinquent pronounce a discourse of humiliation, either standing or on his knees before the offended party, and clothed in emblematical robes, with a mask of a characteristic nature on his heart, &c. There are countries perhaps where such contrivances might answer; but, with us, they would not only be ineffectual, but ridiculous.

In the choice of punishments, Mr Bentham wishes legislators to recollect, that punishment is itself an evil, and that it consists of five parts; the evil of restraint—the evil of suffering—the evil of apprehension—the evil of groundless persecution, and the evils that extend to the innocent connexions of the delinquent. For these reasons, he is anxious that no punishment should be inflicted without a real cause, or without being likely to influence the will, or where other remedies might have been employed, or in cases where the crime produces less evil than the punishment. These admonitions are proper, and, we dare say, sincere; but they certainly are not recommended by their novelty. The punishments which Mr Bentham approves, are such as are susceptible of degrees, uniform in their nature, analogous to the offence, proportionate to the temptation, economical and remissible. He does not approve of punishing with death, and makes a remark upon the penal code of England, which has been

so often repeated by foreigners that it seems no longer to operate as a reproach on the natives.

In the section upon the indirect means of preventing crimes, there is a great deal of genius and strong reasoning, though there are many things that are set down in too rash and peremptory a manner, and some that are supported with a degree of flippancy* not very suitable to the occasion. The five main sources of offence he thinks are, want of occupation, the angry passions, the passion of the sexes, the love of intoxication, and the love of gain. As society advances, all these lose a good deal of their mischievous tendency, excepting the last; against which, of course, the legislature should be more vigilant than ever. In the gradual predominance of the avaricious passions over all the rest, however, Mr Bentham sees many topics of consolation, and concludes this part of his work with declaring that it should be the great object of the criminal law to reduce all offences to that species which can be completely atoned for and repaired by payment of a sum of money. It is a part of his system, which we have forgotten to mention, that persons so injured should in all cases be entitled to reparation out of the public purse.

This closes Mr Bentham's view of the principles of criminal jurisprudence, and terminates that portion of his great work which is contained in the present publication. The separate dissertations which are annexed, and occupy the greater part of the third volume, relate to the same general subject, and possess a considerable degree of interest. The first is a proposal for constructing prisons and houses of correction, in such a form, as to admit of the whole interior being seen at once from a central point, where Mr Bentham is for having a small chamber, fitted up with blinds, where the inspector either is, or is supposed to be, constantly present. This he calls a *Panoptique*, and promises rather greater things from its adoption than are very likely to follow. It has been adopted, however, we believe, in several parts of England with considerable advantage. A bridewell upon the same construction has subsisted for upwards of ten years in this city.

The next dissertation is on the methods and the expediency of promulgating the laws, and the reasons on which they are founded: illustrated by an extract from the penal code which Mr Bentham promises one day to give to the world.

The last discourse, which is by far the most interesting, is upon the influence of time and place in questions of legislation. Mr Bentham illustrates his notions as to the cautions to be observed

* See in particular Vol. III. p. 36. 57, &c.

served in the transplantation of laws, by stating, with some detail, the changes and qualifications that would be necessary in transferring to Bengal those laws that are generally admired and approved of in England. He then examines the effects of time on laws and on society, and, with his usual acuteness and precision, points out the obvious errors into which those philosophers have been betrayed who have either called in question the possibility of great ameliorations, or indulged in visions of absolute perfectibility. The whole of this treatise, which coincides in subject with the great work of Montesquieu, is written with much force of reasoning and vivacity of manner. We regret that our limits will not permit us to enter more fully into the subject, and can safely recommend the perusal of it to a larger class of readers than we can venture to bespeak for the rest of the publication.

Upon the whole, we take our leave of this publication with some feelings of fatigue, but with sentiments of the greatest respect for the talents of the author. It must be our fault if our readers feel only the former. So large a quantity of original reasoning has seldom, we believe, been produced by one man; and the defects of Mr Bentham's book, as well as its excellencies, are such as to assure us, that he has drawn the whole of it from the stores of his own understanding, and scarcely ever condescended either to assist or to correct his speculations by the lights which might have been furnished from without. Notwithstanding all that M. Dumont has done to render the work popular, we are afraid that it will have fewer readers than it deserves. Those who do read it, will also dissent, we should imagine, from many of the author's fundamental principles; but they will infallibly be delighted with the sagacity and independence which distinguishes all his speculations, and will look forward with impatience to the publication of his entire system.

ART. II. *Voyage Physique et Lithologique dans la Campanie, &c.* Par Scipion Breislac. Traduit du Manuscrit Italien, par le Général Pommereuil, en deux Volumes. Paris, an XI. 1803.

AFTER contemplating the agitations of the moral and political world, and the annihilation of the prejudices and wreck of the institutions which ages had held sacred, we survey with complacency the immutable tranquillity of the earth, the peaceful succession of the seasons, and the uniform reproduction of animal and vegetable life. Yet this earth, apparently so tranquil, is pregnant with the most tremendous causes of desolation, and sometimes abandons devoted districts to all the horrors of volcanic explosion, and the awful attendant phenomena. Countries the most
rich

rich in fertility and cultivation, cities the most ancient and populous, have been lost beneath stones and ashes, or overwhelmed by fiery torrents; their very site has been ingulphed, and become the vortex of eruption, or the basin of a pestilential lake. Equally beyond the power of human prescience to foresee, or of human energy to controul, these terrible operations are sometimes directed to devastate countries of ancient formation, and sometimes to create new territories, whose future fertility tends to repay the desolation that accompanied their production.

The most celebrated and most delightful portions of Italy have been modified or formed by the agency of fire. The rock of the Capitol, which Roman vanity called eternal, is the tottering edge of a crater; and the Campania Felice has been the creation of successive lavas, and owes its exuberant fertility to frequent showers of volcanic ashes.

Italy presents every variety and gradation of volcanic and pseudo-volcanic phenomena. Near its northern boundary, the basalts and amygdaloids of the Vincentine are of dubious formation; and the Euganean mountains in the Paduan territory have not an undisputed claim to an igneous origin. The transverse portion of the Apennines, from Parma to Bologna, is noted for eruptions of mud, and emissions of inflamed gas; and the south of Tuscany contains the celebrated Lagoni, and the extinct volcanoes of Monte Fiora and Radicofani. The western states of the Church present a vast extent of territory, universally allowed to be volcanic, stretching, without interruption, from Aquapendente to Veletri, forming the environs of the lake of Bolsena, the hills of Montefiascone and the Montagna di Viterbo, extending east to between Borghetto and Otricoli, and spreading over the vast plain of Rome. It touches the limestone of the Apennines at Tivoli, forms the hills of Frascati, surrounds the huge crater that contains the lake of Albano, and probably communicates by the valley of Anagni with the volcanic district of the Terra di Lavoro.

The limestone of the Apennines, which skirt the Pontine marshes from Piperno to Terracina, extends along the coast by Fondi to Gaeta, and nearly to the River Liris or Garigliano. These volcanic substances appear to form the basis of the valley, and probably extend to Soza and Anagni. Towards the south, Mignano, Teano, Calvi, Capua, Caserta, Nola Sarno, and Sorrento, are all situated within the eastern boundary of the volcanic territory, which comprehends the whole space westward to the sea, forming the celebrated Campania Felice. It is encircled by limestone, stretching from Gaeta to the Cape of Minerva; and, excepting the Monte Massico, and the hill near Calvi, which are limestone, all included in this boundary is entirely of igneous

origin. Nor are the volcanic substances confined within these limits. They form the basis of the valley of the Volturnus, and the whole extent between Cerello and St Agata di Goti; they reach up the Calore towards Beneventum, up the Claudine valley; and, stretching beyond Nocerra, they form the basis on which stands Salerno.

The various parts of this extensive district will be regarded with unequal interest. The lavas of Sessa, Rocca, Monfinc, and Teano, flowed at a period far antecedent to history; the fertile soil of the Campania conceals the pumices, tufas, and ashes, which form its basis; and they, in their turn, bury the lavas, which are only discovered in profound excavations. But, towards the south, we find the islands of Ischia, of Procida, and the whole territory from Cumæ to Naples, rough with craters, and fuming with exhalations; and near these half-extinct remains, we find the formidable Vesuvius resting from the work of desolation, and concentrating his energies for another overwhelming explosion.

Of more than two hundred authors, who have written on the volcanic productions of the kingdom of Naples, very few have been guided in their investigations by scientific views. Affected by the consternation and surprise, which phenomena so tremendous and extraordinary naturally excite, they have endeavoured to transfuse into the minds of their readers the feelings which overpowered themselves, and tried to make amends for the inaccuracy of their descriptions by vague exaggeration and magnificent mistatement. Nothing in the neighbourhood of a volcano was to be explained in an obvious or ordinary manner; clouds of dust were translated into smoke, fragments of pumice into ignited rocks; and showers of rain, with the subsequent troubled streams which furrowed the mountain, were magnified into *mud-lavas*, or into disgorged torrents of water, which were boiling hot, or salt, or both, according to the caprice of the narrator. These awful operations of nature were eagerly seized on by the priests, as a certain mode of obtaining ascendancy over the minds of the bigotted populace; and the members of the celestial hierarchy were promoted or degraded, as their votaries deemed them capable of controuling the fury of the dreaded volcano.*

Even those who studied the mountain with calmer attention, were betrayed, by preconceived opinions, into the most extraordinary mistakes. The Pere della Torre, with singular perversion of observation, says,† that ‘Vesuvius is not a mountain produced by an eruption, or formed little by little, but made of strata of different

* See Breislac, vol. I. p. 225, note.

† Storia e fenomeni del Vesuvio, p. 23.

different matters like all other mountains, and consumed by perpetual fire, which it contains within its bowels.' He also observes, 'that in the interior rocks of the Somma, and of Oltajano, no vestiges of fire are to be seen.' Though free from all such errors, the magnificent work of Sir William Hamilton on the Campi Phlegraci,* decorated with splendid engravings, is rather calculated to give an idea of the scenery of the district, and the picturesque effect and character of the volcano, than to be a vehicle of scientific information. The works of the Abbaté Botis, and the Gabinetto del Vesuvio, by the Duke della Torre, contain many valuable observations, and curious details; but it was not till Gioeni's book, on the lithology of Vesuvius,† made its appearance, that any general and accurate description of Vesuvian substances was given.

This intelligent observer has prefaced his descriptive catalogue by preliminary remarks of considerable merit, and has interspersed notes from which much important information may be gleaned; but he has attended too much to the diversities of individual specimens, and too little to general formations. In volcanoes, each eruption forms an epocha; and it is only by separating the products of one eruption from those of another, and by noting the attendant phenomena, that we can register their history, or reason on their operations. Gioeni only incidentally contrasts the peculiarities observable in lavas of different antiquities; and his observations are confined to Vesuvius, where indeed he found diversity enough to occupy him. The consideration of that single mountain, however, is not enough; and the examination of its isolated products can only be considered as establishing a partial standard of comparison for the substances afforded by the whole extent of the volcanic district, of which it forms a small part. An investigation of the physical constitution of the Campania, was essential to the correction and enlargement of our ideas respecting Vesuvius itself; and for its accomplishment we must ever hold ourselves indebted to the indefatigable perseverance and sagacious researches of Scipio Breislac.

The first edition of this work was printed in Italian, at Florence, in 1798. It has been increased by numerous subsequent observations, and some new maps. The translation into French has been performed by General Pommereuil, who has taken no small pains in its naturalization. The Italian measures of Breislac

* Published at Naples in 1776.

† Saggio de Litologia Vesuviana del Cav. Giuseppe Gioeni. Napoli, 1791.

lac have been transmuted into French metres, which arrogantly figure in the text, while the original expression is degraded to the notes. Many of Breislac's appreciations of distance, where perfect accuracy was not intended, and could not be attained, sounded very well as leagues or miles, but are perfectly ridiculous when reduced to kilometres, hectometres, metres, and centimetres. This pretended precision would be only absurd, if it were correctly founded upon the original; but it frequently appears, that the General gives his kilometres in round numbers, when the true conversion of his author would have afforded a fraction. Dates, of course, are rendered conformable to the Republican calendar; and even the nomenclature of minerals has not escaped. The denominations invented by Hany are familiarly introduced into the text; and the names by which the substances had been previously distinguished, and by which alone they are still known to nine-tenths of the mineralogists of Europe, are termed *ci-devant*. We can hardly suppose it was modesty that induced the General to afford his readers no mode of distinguishing his notes from those of the author, except the internal evidence arising from the diversity of their style and matter. To readers of ordinary discrimination, however, this test is sufficient; for no distinctions can be more marked, than between sagacious observation and frivolous impertinence.

It is far from being our intention to follow the author through the whole extent of his laborious investigations, because we are fully convinced of his accuracy in observing, and his fidelity in reporting; but we shall bestow a few sentences on the eruption of 1794, because it presents some of the most striking volcanic phenomena, and serves to correct some former errors.

On the evening of the 15th of June 1794, after some preliminary shocks, the base of the cone of Vesuvius opened to the west, and a torrent of lava gushed out. Five small craters were formed in its course, and ejected highly ignited stones with violence and in rapid succession. The lava in six hours flowed three miles, and, after destroying the town of Torre del Greco, ran 362 feet into the sea.* The sudden cooling it there underwent, did not affect its texture, or render it prismatic. This lava is of an earthy grain, uneven fracture, and variable porosity.

* Sir William Hamilton says, that according to the measurement of the Duke della Torre, 'the new promontory which the lava formed was 1204 English feet broad; its height above the sea was 12 feet, and as many feet under the water; so that its whole height was 24 feet. It extended into the sea 625 feet.' See Phil. Trans. for 1795, p. 73.

porosity. It will strike fire with steel, and is of a dark grey colour. It abounds in green augites, and contains mica rarely. It is said to have formed augites by sublimation on the walls of the church at Torre del Greco. Glass was converted by it into Reaumur's porcelain. Iron was generally oxidated, rarely combined with sulphur. Copper was softened and oxidated; silver was fused. Whilst the lava continued to flow from the western base of the cone, another opening was formed on the eastern side, at a rather less elevation, and a stream of lava issued from it, and flowed sluggishly near a mile. On the morning of the 16th, the lava ceased to flow from the western opening, and the mouth of the volcano resumed its activity. It remained for four days covered by a cloud of ashes which it ejected, and which showered over the adjacent country, and fell on an average 14 inches thick. At Caserta, more than ten miles from Vesuvius, torches were obliged to be used at mid-day, and the gloom was only broken by the frequent flashes of lightning which partially displayed the mountain.

On the 20th ashes ceased to fall, and Vesuvius became again visible; but during the preceding convulsion, part of its summit had fallen in, and the crater was considerably enlarged. It now ejected, violently, vast numbers of stones; and dense clouds issued from it in continual succession, and ascended to several times the height of the mountain, dilating as they rose. These clouds seemed chiefly composed of minute fragments of lava, pumice, &c. These phenomena continued till the 5th of July; and during that period, every cloud that appeared on the horizon was attracted to Vesuvius. Violent rains, mixing with the loose ashes, formed impetuous torrents of thin mud, which carried devastation everywhere. Exhalations of carbonic acid mixed with azote, and some sulphureous acid, infested the cellars of Portici and Resina, and diffused themselves over particular districts of the country, where they were equally fatal to animal and vegetable life.* The vapours emitted by the volcano, during this eruption, were chiefly muriatic acid, and the muriates of soda and ammonia were abundant in the hollows of the lava. Sulphur and sulphureous acid were of rare occurrence, though the lava sometimes contained the sulphates of iron and lime; it also contained the oxides of iron and arsenic. The humid vapours, exhaled by the lava, rapidly formed thin silicious stalactites, by which, near the new craters, fragments of pumice and ashes were agglutinated.

* Olives and pear-trees alone were exempted from the evil effects of this scourge. See Breislac, vol. 1. p. 221.

We wish the attention of our readers to be particularly fixed on some of these recent and well authenticated facts, as they are of much importance in explaining the general operations of volcanoes.

They should particularly observe the rapidity with which the lava moved—the heat that it communicated to substances at Torre del Greco—the scarcity of sulphur, proved by the lava converting the metallic bodies it approached into oxides, instead of sulphurets or sulphates—the formation of silicious stalactites, by the hot, humid vapours—and the inundations of mud caused by the mixture of ashes and rain. These facts appear not easily reconciled with the assertions of many able naturalists respecting the imperfect fluidity of lavas, their low temperature, and the abundance of sulphur they contain, which has been regarded as the vehicle of their particles, and the pabulum of their inflammation. The rain and ashes forming a paste, and overflowing the country,* seem to account for the formation of tufas and imperfectly consolidated volcanic bodies, without having recourse to an eruption of mud; and the formation of silicious stalactites opens a wide field to curious investigation. In order to appreciate the full importance of these remarks, it is necessary to consider some of the opinions on the most important questions suggested by inquiries into the constitution of volcanoes, which have been supported by the greatest ingenuity, and sanctioned by the most accurate observations.

The most ancient and the most simple mode of accounting for volcanoes, is that which attributes them to the eruptions of a central fire occupying the interior of the earth. To this theory it may be objected, 1. That it is founded on an entirely gratuitous assumption; 2. That it is extremely improbable; and, 3. That it is inadequate to explain the phenomena. The two first propositions require no proof; on the third it may be remarked, that admitting the centre of the earth to be melted matter, it must, from the duration of the fusion, have obtained perfect homogeneity. There can be no grounds for supposing that it was not originally constituted homogeneous; but even if it was originally heterogeneous, its long continued fluidity must have produced a complete and chemical mixture. A fluid, in such a state, must be completely quiescent; and its tranquil existence in the centre of the earth will not avail in accounting for volcanoes.

We

* Sir William Hamilton observes, that the mud formed by rain and ashes became in a few days so hard as to require a pick-axe to break it. See his 'Account of the late eruption of Vesuvius,' in the *Philosoph. Transact.* for 1794, p. 73.

We are indeed told by the ablest advocate of this system, that, in the mineral regions, the only effects of heat are fusion and expansion.* How is this expansion produced? It cannot result from the continuance of the same degree of heat. There are no methods we can devise, by which a homogeneous fluid can be expanded by heat, but by increasing the temperature till the fluid itself be rarefied, or by introducing some new substance whose solution may produce an evolution of gas. But what is this substance to be, and whence is it to come? It will require a new assumption to provide the heaven which is to set the bowels of the earth in fermentation. The expansion by increase of heat cannot take place, because the theorists themselves have assigned its limits, by depriving the central fire of all pabulum. Increase being impossible, it must, in conformity with the laws of heat, diminish, by equalizing the temperature of the surrounding bodies, and therefore cannot produce an expansion. It is in vain that water is presumed to trickle on it from above. It is equally in vain that the sea is supposed to be introduced. This might produce earthquakes, with furious emissions of gases and steam, but no lava. The water must find its way into the interior of the melted mass, before it could produce the expulsion of a lava; and such an introduction is effectually prevented by the inferiority of its specific gravity. Pour water on melted iron, and there is no explosion; pour melted iron into water, and still there is no explosion; enclose a drop of water in the heated metal, and no known power can controul it.

Besides, admitting the homogeneity of the melted mass, which we think cannot be denied, whence come the diversities of lavas? Why have we basalt, which is a lava, according to this system, in one place; and glass in another; pumice in a third, and the earthy lavas in a fourth? Why have we sometimes sulphureous vapours, sometimes muriatic acid, and sometimes hydrogenic gas? In short, whence arise the perpetual variations of volcanic productions? The specific gravity of the earth, taken collectively, is found to be nearly double the average gravity of the rocks which compose its surface. The central fluid must therefore be of at least double the average gravity of rocks. How comes it that lavas and volcanic glass are generally under the medium gravity of rocks, and that basalts are very little above it? We have discussed this ingenious theory at some length, because it has been adopted by men of talents, and because, at first sight, it appears completely to overcome every difficulty, by assuming all that is

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* See Illustrations of the Huttonian Theory, by Professor Playfair, § 89.

required to be proved. But it appears to us, that, granting this unwarrantable postulatam in its utmost extent, it is insufficient to provide the elucidation required.

Werner, who had studied the extraordinary appearances produced on superincumbent rocks by the combustion of beds of coal, applied these facts to the explanation of volcanic fires; and supposed lavas were formed by the fusion of basalt. This opinion has some plausibility; but it is wholly incapable of accounting for the duration of volcanoes, for their intermittence, or the extent of their operations. Still less probable were the opinions of the philosophers who recurred to petroleum and to sulphurets of iron. Breislac, who, like most men of very extensive observation, is little addicted to theorizing, has been rather unfortunate where he has attempted it. He finds nothing incongruous in the joint action of coal, pyrites and petroleum. He discovers a bed of coal a foot thick near Beneventum, which he regards with much exultation; though he might as well think of feeding a furnace with a sheet of paper, as of stimulating a volcano by such a supply. By decomposing his pyrites, he distils petroleum from the limestone of the Appenines; it carries with it some phosphoric matter, (created expressly we presume), and finds its way to commodious reservoirs under Vesuvius. There, water saturated with common salt waits to receive it, and their union is cemented by the Hymeneal torch of electric flame. The usual consequences of matrimony, discord, fury, and uproar, ensue; and the unnatural parents turn out of doors the lava they engender between them.

Theorists who thus endeavoured to account for the inflammation of Vesuvius, were much embarrassed to obtain the necessary supplies of oxygene. Dr Thomson, whose residence at Naples afforded him ample opportunities of observation, and whose acute genius has in several instances thrown light on volcanic operations, has devised an explication of this difficulty, more remarkable for its boldness than its probability. He supposes that, at certain degrees of heat, the oxygene contained in the carbonic acid of the limestone of the Appenines, may be inclined to enter into new combinations; and he illustrates this doctrine by the beautiful and well known experiment of Tennant, who operated the decomposition of carbonic acid by means of phosphorous.* On this theory, it may be observed, that it commences by supposing the previous existence of a heat of great intensity, without providing any means for its production: 2. It supposes the application of some unspecified base to the carbonic acid, to attract the oxygene;

* Giornale Letterario di Napoli, vol. 106. p. 3.

gene ; he cannot possibly suppose the phosphorescent limestone to contain phosphorous enough for this purpose : 3. It affords no employment for the charcoal of the carbonic acid, which is left to chrySTALLIZE into diamonds, plumbago, or what it likes best : 4. There is no way of disposing of the immense quantity of quicklime which this process would produce ; part of it may be incorporated with the lavas, but the whole cannot be employed in this way, without rendering their basis almost entirely lime, which is notoriously not the case.

But the palm of superior originality, in this contest of theoretic invention, must be accorded to the genius of M. Patrin, who has long been advantageously known to the world by his travels in Siberia, and his splendid collection of Siberian minerals. In an essay read at the Institute, and afterwards published in a separate form, he procures muriatic acid from common salt by a rather arbitrary process, and decomposes pyrites by its means.* He supposes sulphur to be concrete electricity, and then identifies it with phosphorus.† He manufactures calcareous earth from thunder and lightning ; ‡ and he discovers a metalliferous fluid, which is at once the base of the muriatic acid, and the generator of metallic veins. It assists phosphorous in fixing oxygene under an earthy form ; || and, with the united aid of the other substances we have enumerated, he very successfully accounts for every existing phenomenon. On this theory, we do not presume to offer any observations.

Researches into the original causes of volcanic inflammation may well admit of diversity of opinion, where the operations, from which our information should be derived, are so profoundly concealed. The products only are submitted to examination ; and though they are prodigiously abundant, and the observers proportionably numerous, there is a woful scarcity of consistent evidence. Yet there are some points on which all agree ; and perhaps it may be possible to arrange the principal facts, so that they may not appear contradictory.

Much disputation has arisen respecting the intensity of the volcanic heat. Those who derived it from the inexhaustible magazine of central fire, were lavish of it to a degree which very ill suited the parsimony with which those were obliged to husband their fuel, who trusted to coal and petroleum for a supply. They

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contended,

* Recherches sur les Volcans, p. 8. & 9.

† Id. p. 10.

‡ Id. p. 11.

|| Id. p. 17. & 27.

contended, that the heat of volcanoes was extremely small, because it was incapable of altering the forms of the leucites, augites, and feldspars, which lava so abundantly contained. Even the illustrious Dolomieu, the father of correct observations on volcanoes, was swayed by this consideration so much, as to adopt a very improbable mode of explaining the fusion of lavas, at a low temperature, by means of sulphur.

Observing the similitude of lavas to primitive rocks, he concluded that igneous fusion was not produced, but that the heat expanded the substance, and allowed its particles to slide on one another. Even this operation was confined to the basis; for he supposes the feldspars, augites and leucites, to be wholly unchanged. Though he appears to attribute very mysterious effects to the long continuance of heat, he was so conscious of the improbability of his theory, that he endeavoured to render it more reconcileable to the known laws of nature, by supposing that this strange fusion was operated by introducing between the particles an intermediary substance in which they were to be suspended, and which was to be the vehicle of their apparent fluidity. When this substance was removed, they approached, and were reunited into a rock resembling that which they had formed previous to the operation. This convenient agent was sulphur; and Dolomieu attempted to establish an analogy between its supposed action in rendering rocks easily fusible, and the action of phosphorus in facilitating the fusion of platina.* No analogy, however, exists between these operations. Phosphorus chemically combines with platina, but sulphur does not enter into any such combination with lavas; and Spallanzani determined, by direct experiment, that the addition of sulphur nowise assisted their fusion.

Even supposing that the particles of lava were thus suspended, it is obvious that, the moment the vehicle was taken away, as Dolomieu supposes the sulphur to have been by combustion, the particles, instead of consolidating, would be left disunited like sand, unless the heat was sufficient to produce their agglutination by igneous fusion; and if it was so great, the sulphur would be only an unnecessary incumbrance. It may be farther observed, that this theory assumes the existence of an immense quantity of sulphur, and supposes its lavish combustion in every eruption. But the vapours of Vesuvius contain very small quantities of sulphureous fumes. They consist principally of muriatic acid,
or

* *Vide Dolomieu, Lipari, p. 95.*

Id. Journal de Physique, an. 2. tome 1. p. 118—120.

Id. Sur les Isles Poncés, p. 10, &c.

or hydrogen; and the lava of 1794 contained few traces of sulphur, and abounded in oxygen.*

Though we have no means of determining the heat of a lava when it first issues from its crater, perfectly liquid and in violent ebullition, the destruction of Torre del Greco has provided us with an approximation to the heat it could communicate after it had been six hours emitted, had traversed an extent of country three miles in length, and had been refrigerated by the contact of paved streets and houses. We find that, in the ruins of that unfortunate town, the window-glass near the lava was converted into porcelain jasper; that pretty large masses of iron were oxidated to the heart; that copper was oxidated and softened, and that silver was melted. Fine silver is said to melt at 28° of Wedgwood's pyrometer, or at 4720° of Fahrenheit. The portions of lava which acted on these metals, must have been very considerably cooled by the pavements and walls of the houses; and, besides, it was not in immediate contact with the metals. We must therefore assign it a much higher temperature than that which was communicated to the substances affected. What that temperature was, we do not presume to determine. Breislac mentions one circumstance that indicates a tremendous heat. He says augites were formed on the walls of the church by sublimation from the lava. In this particular, however, we cannot help thinking that his usual accuracy must have failed him, as no other of the observed effects appears at all proportioned to this.

Admitting the lava to have been quite hot enough to have flowed with the usual fluidity of glass, it need not have been so hot as to destroy the substances contained in it; for none of them will melt at a lower temperature than 120° of Wedgwood. The grand difficulty, however, still remains; for how does it happen that lavas are almost universally found with a stony fracture and texture, when a portion of the same lava melted produces a glass? Even for this enigma we are now provided with a solution.

The conversion of glass into a stony substance, improperly called porcelain, was discovered by Reaumur, and would have unveiled the whole mystery, had the circumstances in which it

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was

* The observations of Dolomieu are very strong contradictions to his theory. In his catalogue of the lavas of Etna, p. 370, he observes, that the sublimation of sulphur is more abundant in half extinct volcanoes, like the Solfatara, than in those which have frequent eruptions. Etna only forms it in the principal crater, and in small quantity.

was operated been carefully observed. This was the first dawn of discoveries of inconceivable importance and extent; and it seems more remarkable that their complete developement should have followed so slowly, than that extensive corollaries should now be deduced. Mr Keir, in 1776, directed the public attention to the crystallizations formed in glass by cooling, and the stony texture which glass slowly cooled assumes.* These facts were not consistently applied to account for the stony appearances of lavas, till Sir James Hall, in 1790, projected, and partly performed some experiments, the completion of which was reserved to 1798. Dr Beddoes, in a paper contained in the Philosophical Transactions for 1791, amidst a chaos of inaccurate observations, distinctly points out the change from the vitreous to the stony texture produced by gradual cooling, and applies it to lavas, and illustrates it by instancing Reaumur's porcelain and the crystallization of slags. This doctrine received its full elucidation, when Dr Thomson, in 1795, published his sketch of a classification of volcanic products, in which he boldly and clearly assumes it as the basis of his arrangement.† He maintains all lavas to have been in a vitreous state, and to have become stony by slow cooling. We find that Breislac inclines to the same opinion. Sir James Hall has since synthetically determined the point by the satisfactory results of his well imagined experiments. Indeed, it is wonderful how it so long eluded observation, when the slag of every furnace exhibits it in the most striking manner.

If it be inquired, how the known existence of volcanic glass, sometimes in very large masses, ‡ is to be reconciled to this theory, it may be answered, that as the materials of lava appear to be constantly varying, some glasses may be found less disposed to crystallize than others, and require a longer continuance in a regulated temperature. 2. That we know of no instances of solid masses of volcanic glass of great thickness; for, respecting those of Lipari, Spallanzani expressly states the facility with which they were divisible into thin slabs, which he attributes to a small quantity of earth interposed between each slab. This statement

* See Phil. Trans. for 1776, Vol. LXVI. p. 530. Ten years after, M. Pagot de Charmes published some observations in the Journal de Physique, Tom. XXXIII. Part II. p. 211. on the crystals of glass; and M. D'Hérminat afterwards added some illustrations. These gentlemen, however, do not appear to have attributed the formation of the crystals to the gradual refrigeration of the glass.

† Giornale Letterario di Napoli, Vol. XLI. p. 59.

‡ Spallanzani Viaggio alle due Sicilie.

statement leaves no doubt that these masses were formed by the accumulation of successive coats of very fluid lava, which, running over a large surface, and being in consequence very speedily refrigerated, retained its vitreous texture. We may remark as an additional confirmation, that the eruption of Vesuvius in 1779, when the lava was chiefly thrown up in a fountain from the crater, and was in consequence rapidly cooled, produced more vitrifications than all the other eruptions of Vesuvius taken collectively.

If the stony texture of lavas be considered as accounted for, and it be admitted that they have all sustained the igneous fusion, and been in a vitreous state, all controversy concerning their bases may terminate. Dr Thomson has observed, that we can only judge of the basis of a lava, by the portions of unaltered stones which are found in it.* Even this is obviously an incorrect test; for a lava may flow over and envelope stones of all descriptions. The bases of lavas have been deduced from the substances contained in the lava, and supposed not to be generated in it. Thus, porphyry or granite furnished the feldspars; augites were found occasionally in basalt; but unfortunately no known rock contained the leucites which form so abundant an ingredient in the lavas of Italy.† There seems no way of overcoming this difficulty, but by supposing either that the volcano had pierced through all the strata which appear on the surface of the globe, and had discovered some unknown rock which served as its pabulum; or, more simply, by holding that the leucites were generated in the lava. This opinion seems infinitely the

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most

* Abozzo d'una sciagrafia Volcanica, nel Giornale Letterario di Napoli, Vol. XLI.

† We believe this assertion to be correct. Many mistakes have arisen from confounding the *zeolytic dure* crystallized in 24drons (the analcime trapezoidal) with the leucite. It is readily distinguishable by the great fusibility of the analcime. The leucites which Faujas St Fond imagined he found near Glasgow, were analcimes. Gioeni mentions leucites in limestone ejected from Vesuvius; but as he does not seem aware of the approximation of form which the analcime is capable of assuming, there is reason to doubt to which species they belonged. Dolomieu in the *Journal de Physique*, Tom. II. An II. says he possesses a specimen of gold ore from Mexico accompanied by minute leucites; and that Lelievre had found leucites in a granitic substance, near Gaverne, in the Pyrenées. He probably assumed them to be leucites from their external form only, as no experiment is cited in confirmation. Even admitting the existence of these detached instances, the general position is not invalidated.

most rational, and is strengthened by numerous arguments derived from the consideration of those lavas in which leucites exist.

Leucites are often found to contain a minute central nucléus, which not unfrequently appears to be a speck of lava. Globules, of a substance exactly similar to the enveloping basis, are often found in the interior of leucites. They frequently contain augites, partly projecting into the basis, partly imbedded in the leucite; and the leucites have been observed to be elongated in the direction of the pores of the lava.* Lavas are often composed almost entirely of leucites which absolutely touch one another, and are adjusted so as scarcely to afford any interstices for the basis which connects them; and extremely minute leucites form not unfrequently a kind of basis for large crystals of augite. Admitting the leucites to be generated in the lava, there can be no reason for denying the same origin to augites and feldspars, and to other substances contained in lava, provided they are *more difficult to fuse* than the basis in which they are engaged. After observing the various insulated crystals that are formed in glasses in cooling, the probability of such an origin cannot be denied. But it is equally clear, that all crystallized substances which are *more fusible* than the basis, must be of posterior formation. They never are constituents of the lava, and are found existing isolated in its cavities.

Substances generated in the lava, and those which have been afterwards introduced, have a striking dissimilitude in the manner of their connexion with it. The first are commonly closely enveloped, the basis of the lava applying itself to them in complete contact; or if it recedes, as it sometimes does, from leucites, it bears an impression of their sides, which shows that it merely retired in consequence of contraction; and the impression is so sharp, as to prove how perfectly it had accommodated itself to the form of the leucite. When any of this class of substances appear in the cavities of the lava, we always find one end of the crystal entering the solid mass; and it is evident that the apparent protrusion of the other part is merely in consequence of the cavity being formed by some evolution of gas after the crystal was formed; the gas forced aside the fluid basis, and the crystal remained projecting. The substances of subsequent formation have no such connexion with the basis of the lava. The line of their separation is perfectly defined by the boundaries of the cavity in which they are formed, and a very slight effort

effort detaches them entirely. Of this description are the zeolites, calcareous spars, &c. which are frequently found in the cavities of the lavas of the Somma, and not unfrequently in those of more recent origin, particularly in the lava near Portici, called the Granitello.* Breislac tells us, that even water is sometimes found in the interior cavities of lava, and endeavours to account for its being there by a rather mysterious application of the doctrine of infinite pressure. Admitting the pressure in the interior of the volcano to be so great as to confine a globule of red-hot water in lava, that pressure is removed the moment the lava issues from the mountain, and the water must instantly force its way out. On the same principle, zeolites containing water in a state capable of being easily dissipated by heat, cannot be generated in lava during its ignited state; and to account for their after existence in it, we see no better mode than to recur to the theory of infiltration introduced by Dolomieu. This doctrine does not meet indeed with M. Breislac's approbation; though we confess ourselves somewhat at a loss to perceive the force of his arguments, after considering the facts he has himself presented us with, respecting the daily formation of silicious stalactites, from hot humid vapours percolating through the cracks of lavas and other stones, and even penetrating their apparently solid substance, and lining their cavities with silicious pearls.

A subject of much curious inquiry remains, respecting the minerals ejected unaltered by Vesuvius. The greater part of these consists of varieties of carbonate of lime, spathose, shistose, granular, compact, and sometimes containing shells. The doctrine of pressure has been applied to explain this phenomenon also; and we are farther told by the ingenious Dr Thomson, whose opinion Breislac seems inclined to adopt, that these shistose or granular and apparently primitive limestones are nothing but the common splintery limestone of the Appenines modified by heat and pressure. He does not explain how the specimens containing petrifications escaped change; and, besides, this explanation fails as the former one did; for if the internal heat was sufficient to change the texture of the limestone, or the pressure great enough to confine its carbonic acid, still, at the moment of its expulsion, it must have been intensely hot, relieved from pressure, and exposed in open air. Why was it not reduced to quicklime?

We think it more probable that these limestones have never been acted on by the volcano at all. When Vesuvius made its first

* Professor Playfair, in his *Illustrations of the Huttonian theory*, § 62, affirms that zeolite and calcareous spar are never found in lavas, and applies this observation, in distinguishing lava from what he terms *whinstone*.

first eruption, it is probable it broke through a roof of calcareous rock, the portions of which afforded these fragments. These would be expelled by the elastic force of the escaping vapours; numbers of them lighting on the interior edge of the newly formed cone, would again fall in, and probably be again expelled without remaining a moment, as often happens repeatedly to the same stone in every eruption. From the degradation of the cone during intervals of quiescence, a large portion of these stones would again fall in, and with other rubbish choke the crater, as always happens in the intermissions of volcanic fury, till the next eruption drives them all out. Thus the same stone may be again and again ejected from the volcano, without ever approaching the heated part. It may be observed, that excepting such stones as may have been accidentally lodged in the crater, Vesuvius has never ejected limestones in its recent eruptions. The limestones and the other premordial substances are all found buried in the rubbish of the Somma, and are only revealed by the ravages of torrents. Gioeni has been induced to attribute them all to one epocha, which perfectly accords with the explication that has been attempted above.

As to the other supposed primitive stones which Vesuvius has ejected, there seems less reason to discuss them. If they be primitive, the same explication which serves for the limestone may account for their remaining untouched. Some of them have hitherto been deemed peculiar to this mountain, and they are associated with the limestone and with each other in a manner which has never been observed in any other part of the world.

We have entered at such length into these interesting speculations, that many points of inferior consequence remain undiscussed; and we relinquish their farther consideration with the less regret, because there are not many occasions on which we are inclined to dissent from the opinions of Scipio Breislac. For the many curious and valuable facts which he details, we must refer our readers to the work itself, which they will find illustrated by a general geological map of the Campania, and by other maps of particular districts.

We cannot conclude without expressing our wish that he may be enabled to complete what he has projected, and that a survey of the volcanic districts of the states of the Church may be added to his present work.

ART. III. *Sketches on the intrinsic Strength, Military and Naval Force of France and Russia; with Remarks on their present Connexion, Political Influence, and future Projects.* In two Parts. Part I. London, 1803. pp. 216.

THIS is altogether a very singular work. The language is that of a foreigner pretty well acquainted with English, or of an Englishman who, by long residence abroad, has both lost the free use of his native tongue, and mingled it with foreign idioms. From internal evidence we are inclined to believe the author's own assertion, that he is a Briton: for his sentiments, though with some considerable exceptions, are generally of that description which we usually compliment with the epithet of *British*; an appellation more honourable, if possible, in the present day, than at any former period of our story. The typography of this book is certainly foreign, although London is marked on the title-page, without either printer's or publisher's name. The preface is dated from the Hague, and the postscript from Paris. Not even in external character is it easy to classify this curious performance. Its shape is something between that of a quarto and an octavo; and its leaves are of a consistency between that of paper and of pasteboard. The matter and style of the book are not less original; and we think they are of sufficient interest to warrant a pretty full character and abstract, with specimens.

Although we differ widely from the author in many particulars, and highly disapprove of the spirit in which some of his statements are conceived, we should nevertheless find it very difficult to enter into any general refutation of his doctrines, or to give a full examination of the foundations upon which he rests them. This difficulty arises from the want of general principles, which prevails through all his speculations, and from the very questionable shape in which his facts come before us. He appears to have wandered a good deal over the Continent, and to have observed, and perhaps inquired, with some acuteness, but, we are convinced, without any great diligence or minuteness, and, we are perfectly certain, without the guidance of those enlarged views which alone can ensure accuracy of detail, or render it at all useful in systematic reasonings. Not that he can be accused of seeing without a preconceived theory; on the contrary, like all those who assume the title of *plain matter of fact men*, he is perpetually under the influence of some vague hypothesis, rashly adopted from a limited range of observation, and confidently relied upon as a safe guide, from ignorance of the maxim, that, in political science, insulated facts can never lead to any solid or general conclusions. He has thus acquired the habit of forming the most hasty opinions on things necessarily involved

involved in all manner of difficulty and doubt ; of stating, as matter of fact, things which no man can see or know without a long and delicate process of reasoning ; and of drawing positive inferences from such statements, as if, in the first place, they were capable of being verified, and as if, in the next, they formed, however true, the whole materials of the calculation. This intrepid reasoner sees no difficulties in questions the most complex, and treads the delicate ground of political arithmetic as confidently as he could plod in the sure tracks of abstract mathematics. He regulates the internal arrangements of states by the compass and square, as if those structures were built of inanimate materials ; and applies his rash and partial calculations to the action of the great political machine, as if it moved without either friction or resistance. He frequently displays liveliness of fancy, and sometimes acuteness and powers of discrimination ; but we look in vain for enlargement and expansion of intellect, or even for such a reach of thought as would be required to manage a long chain of obvious reasoning. If he observe on a small scale, he reasons on one yet more confined, seeing only a part of what he looks at, and comparing only parts of what he sees.

To the limited endowments of our author, however, the boldness of his assertions, and the contemptuous arrogance of his style, form a contrast sufficiently striking. In these common failings of political theorists, he, indeed, very far exceeds the ordinary measure. Without giving the sanction of a name to his statements, and without referring to any authority, he challenges our assent to a mass of facts, many of them perfectly new and almost all bordering upon improbability. Many of those statements may be true, or they may not. We are told that some are the result of personal observation, and others of inquiries among intelligent friends. We are not told which of them rest upon the writer's authority and that of his friends, and what proportion is derived from sources open to public investigation ; nor are we informed who this author and his correspondents are, that we should give credit to their averments. The consequence of so great a defect inevitably is, that we can only confide in such of the facts narrated, as are consistent with, nay supported by other authorities ; and even, after making this deduction, there still remains field for scepticism, since many of the statements given under the name of facts, belong to a class which no man can possibly know with certainty, and could only exhibit the ignorance or presumption of him who might bring them forward, if he should avow his name. We have already mentioned one characteristic of our author's manner—the high tone in which he delivers his information, and dictates his opinions.

nions. Far from recommending to speculative writers an excessive modesty or punctilious caution, we think the former is generally the outside of emptiness and impotence, while the latter is too often allied, in reasoning as well as in conduct, to that bastard kind of prudence, the offspring of cunning, and the cloke of timidity. But on points necessarily involved in obscurity, an inquirer should speak with a corresponding degree of hesitation. On matters which no man can see clearly, it is unbecoming to dogmatize, as if no one should dare to doubt. It is still more absurd to despise the world for the hesitation with which your dogmas may be received, when you proclaim that you alone have been able to apprehend their truth. Nor should it ever be forgotten, that an affectation of "superior intelligence upon subjects in their own nature extremely dark, is mere quackery, if the materials of the calculation are concealed; and that an obscure individual, who rails abusively at 'kingdoms, principalities and powers,' sadly mistakes petulance for dignity and force.

Of these very obvious considerations, the author of the work before us, seems to be little aware. We have seldom been schooled by a more dictatorial or presumptuous master; and when he changes the didactic style for invective, his language is generally that of coarse and vulgar abuse. He is fond of calling names, when he wishes to be strong; and the appellations which he selects, are frequently cant phrases, or scurrilous epithets. From railing at 'worthy John Bull's magnanimity,' and other heavy ingredients; or, scouting the ignorance of 'our dotard countrymen,' he sometimes descends to individual abuse; collects sarcasms against the conduct of the British representatives in foreign courts, or reviles the 'pestiferous institutions' of such 'errant quacks as Baron Voght and Count Rumford.' In the part of these sketches already published, the subject admits less of this personal kind of invective; but if we may judge of the second part by the table of contents annexed to the first, it must consist almost entirely of that scandal, half political and half personal, which travellers may so easily pick up abroad, concerning the ambassadors of their own country, and to which those, who the best discharge their duty, and preserve the dignity of their station, are commonly most exposed. It is singular that one so well versed in what is called secret history, as our author appears to be should not have reflected on the absurdity of anonymous publications in this slippery and dangerous branch of literature. When he comes forward with his second part, we trust he will recollect that the individuals against whom it is levelled, have a right to demand his name
and

and his authorities ; and we think this claim sufficiently authorised by a considerable portion of the present volume.

Our author has thrown together his thoughts in a more careless manner, and delivered them with much less regard to method than even the title of ' sketches ' might have led us to expect. For this defect he in part apologises, by saying, that his remarks were printed at different times whilst he was travelling on the continent. There are, however, in the whole design of his work, clumsy and inconvenient irregularities which no degree of haste in the execution can excuse. He appears to have allowed himself as little time for thinking and digesting, as for comparing and correcting. He brings out his ideas piecemeal, and then quits the topic, until some casual association recalls it ; when he repeats and enlarges, and frequently modifies what he had formerly begun to explain. The notes which accompany every page, afford a clear proof that he is deficient in that luminous arrangement of ideas which is equally necessary to the formation of accurate or enlarged views, and to the communication of knowledge in an intelligible manner. Those notes are nearly equal in bulk to the text ; and they contain no digressions or additional illustrations, but essential parts of the author's opinions and arguments, which he ought to have incorporated with the rest, as they are, indeed, frequently of much more importance to the subject than the text itself. Upon the whole, it is our opinion, that this writer possesses considerable acuteness and great activity of mind ; that he has profited less by his apparent opportunities of information, than a man of cooler judgment and greater stores of previous knowledge might have done ; but that he has proved himself capable of affording valuable hints upon parts of the great questions which he discusses ; — provided he can bring himself to reason more deliberately ; to resist the glare of a paradox ; to think more modestly of his own powers and acquirements ; and to carry with greater hesitation into the affairs of states, that arithmetic, which he may perhaps have found easy and infallible in the business of his *comptoir*. His capacity of systematic inquiry, or long, connected, comprehensive reasoning, we are disposed entirely to doubt ; and as a patient, discriminating observer of events, he ranks still lower in our estimation.

We proceed to bring before our readers, a view of the very interesting topics which these ' sketches ' are intended to discuss. After the general remark which we have made upon the doubtful authority of the matter of fact contained in them it will not be necessary particularly to indicate all those statements which, from their mere want of support, appear to deserve no consideration.

consideration. We shall from time to time suggest such observations as may shew how inaccurately a great proportion of the facts have been collected ; and it furnishes no weak argument against the whole mass, unauthenticated as it is, if we find a considerable part at variance with accurate information, or repugnant to the unquestionable principles of reasoning.

The Introduction consists of a few general remarks upon the progress of nations, from weakness to maturity, and on the means of arresting their retrograde motion. In the early ages of society, men are easily roused to martial pursuits, and, as aggression is generally attended with success, their conquests are rapid and extensive. Arrived at a certain pitch of greatness, when offensive measures are no longer necessary to secure independence, they are apt to be satisfied with the power already acquired, and their rulers are flattered with the ideas of enjoying in peace and safety the present extent of dominion. This period, usually denominated the maturity of the state, our author regards as the most critical stage of its existence. To the activity and energy by which the height was gained, a dangerous indolence and effeminacy succeeds ; and, after a momentary pause, a rapid and universal depravation begins to spread. Who, he demands, shall check this evil, and save the nation ? The rulers partake in, and profit by the general corruption of the people ; and the effort, which is too great for *their* virtues or their talents, is, in others, deemed patriotism, only if successful ; and if it fails, is denominated rebellion. But, in monarchies rightly constituted, there is an exception to the rule. Hereditary sovereigns are hereditary patriots ; their only good lies in the prosperity of their people. When all ranks are sunk in apathy and vice, a patriot king retains the power of saving and restoring the nation. He has only to use his authority according to the dictates of his real interests ; for

—‘ such a government will always have the will, the physical and moral powers of the nation at its unconditional disposal. With these—to consolidate the rank and prosperity of a once independent state, it is only necessary to make the wealth of the nation the spring of national industry, and combine enjoyment with morality, so as to make both *stimulus* to public spirit and national improvement.’ p. 6.

If, by this introductory dissertation, our author means to illustrate the assertion, that a nation cannot remain stationary, but must be either on the advance or decline, we are little disposed to dispute with him, except as to the method which he has taken to prove it. For it does not appear how external causes must necessarily operate the downfall of a community as soon as it has reached a certain pitch of grandeur ; and, still less, how a state of repose from aggressive warfare should necessarily be fatal to the
internal

internal prosperity and the independence of the people. On the other hand, we are at a loss to imagine how even an hereditary and patriot king could regenerate a people so deplorably sunk in effeminacy and vice as he supposes; or from what foreign region such a sovereign is, in this posture of affairs, to summon all the 'respect, experience, vigorous integrity, and known talents,' with which he is 'by a single nod of command' to 'fill the public functions of the state.'

The 'Sketch' commences with some declamation against that mutual jealousy which has so long divided nations, and more especially the cabinets of their rulers; which has converted politics into the art of tricking, has perpetuated wars, and drained countries of their useful hands, while it loaded them with oppressive taxes. Industry, he maintains, has thus been burdened in the lower orders, and enjoyment abridged in the higher. Universal discontent with the ruling powers has arisen from the grounds which they have afforded to popular murmurs; and not from the writings of speculative malcontents, who, but for the errors of practical statesmen, would have had no materials upon which to work. Our author next lays it down as indisputable, that the mastery of the European continent is now divided between Russia and France; the former ruling either directly or indirectly the north and the east; the latter possessing the same influence or sway over the west and the south. If these great powers unite, nothing in our hemisphere can withstand them. Austria and Prussia, while independent of each other, may be allowed to remain nominally independent of Russia and France; but the moment of their union, if we rightly comprehend the author, will be the signal of their destruction. The plan of these sketches is, therefore, to consider the present resources and views, first of France, and then of Russia; and to point out their relations towards Great Britain.

I. To hear of the immense natural resources of France, is unhappily far from being a novelty. Our author's calculations, however, both of their present extent and their probable improvement, are constructed on a sweeping species of arithmetic, to which we are not altogether accustomed. Previous to the Revolution, it seems, only two fifths of the land susceptible of culture were in cultivation; and the system of management to which that portion was subjected, only produced a third of what ordinary good husbandry might have obtained. Even under this management, however, we are told that the government drew eight millions Sterling from the produce of agriculture, and the church as much. The whole burdens upon the produce of agriculture, amounted to twenty-one millions, and this may be increased at least

a million; to which eight may be added for duty on the consumption of those detached from the soil, but living by its produce; and a territorial revenue of 30 millions will thus be easily raised, after abating two sevenths of the burdens imposed by the old government.

Upon all this we have two remarks to offer.—In the *first* place, how did the author discover that just two fifths, and no more, of the arable land in France was in cultivation, and that this portion was managed exactly so as to produce one third of what ordinary husbandry might have drawn from the ground? In other words, how did he find out that precisely two fifteenths were raised of the produce which might and should have been raised; and that, of course, a territorial revenue of above 157 millions Sterling might have been collected, had the soil been only tolerably well managed? But, *secondly*, we perceive he has committed an obvious mistake in estimating the rise which may be expected in the territorial revenue. When he at first talks of excise on the consumption of those whose manufactures and trade are supported by agricultural produce, we do not clearly see his meaning; but as he specifies this branch of revenue under the name of a territorial impost, and as he afterwards, in confirming his estimate by a detail of the old revenue, enumerates the *barrier duties* under the name of excise and consumption duties, we perceive that the eight millions which are to arise from the consumption of those who manufacture agricultural produce are to come from a direct impost upon the transit of that produce. A great allowance should therefore have been made in estimating the rise of this transit duty; because the government is supposed to come into the place of the church and crown with respect to annexed lands; and this duty is one which must fall immediately upon rent. It will not diminish either the *vingtèmes* or tithes; but it must be deducted from the profits of domains which accrue to the state, not as tribute, but as rent.

If we were required to point out a specimen of our author's deficiency in general views, proportioned to this rashness in calculation, we should refer to his unqualified and dogmatical assertion, that the first step necessary for the agricultural improvement of the republic, is entirely, and at all times, to prohibit the exportation of corn. This amounts in the present day, we conceive, to a downright contradiction in terms. We might also mention his idea of a just land-tax,—which, he says, ought not to be proportioned to the rental, for that is fallacious—or to the produce, for that would be unjust—but fixed by a *cadastre* made upon actual survey of the quality of each acre. Such a method of raising a tax, we imagine, would not only be in the highest degree

expensive, but it would either be unjust or arbitrary. It would be unjust, if the assessment were made according to the quality of the soil, by an absolute and universal standard, because a man would then pay for the indolence, or ignorance, or poverty of his predecessors. It would be extremely arbitrary, if it were laid on by a fluctuating rule, because this must vary with the pleasure of the assessors, who must of course repeat, every year, their survey and valuation. We shall, however, proceed to the other lights in which the resources of France are viewed.

From the consequences of the revolution, our author prognosticates a great improvement and extension of manufacturing industry. The ancient prejudices against this branch of employment are done away; the destruction of paper has secured the level of prices; and the preponderance of French influence in other countries, may secure to the produce of the national industry a preference in foreign markets. All the advantages which France now enjoys over the rest of the continental states, give her goods a natural preference in those markets; and the risk of competition from Great Britain is prevented by the high price of labour in that country. The British workmen, indeed, he allows are more skilful; but he adds, the French may be taught, and the cheapness of provisions will compel the English workmen to emigrate. Thus, then, does this author clearly foresee, that the superior excellence of British manufactured produce, will be of no avail in retaining a command of the European market, because foreigners *may* become as skilful; and that the high price of provisions will induce emigration among those classes, who are ruining us by the price at which they sell their labour. To the former prediction, it is an obvious answer, that by the same kind of reasoning every superiority may be argued away. Capital may be acquired by other nations, which will lower their profits; their population may increase, and their labour diminish in price; their soil may be explored, and its produce varied. How impossible would it be, then, for any state to reckon upon maintaining its comparative advantages in manufactures or trade? The comfort is, that by the same prophetic powers, we may foresee some chance of changes beneficial to Great Britain. The eyes of continental states *may* be opened, and their courage roused against France; the French themselves *may* discover that peace is necessary to the improvement of their commerce; and the powers of Europe *may* learn, that their safety depends on a recurrence to ancient principles of international policy, and a confidence in that nation, whose magnanimity has never forsaken, and whose good faith has never betrayed them.

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The prediction, of English artists emigrating to France for the sake of cheap living, is, if possible, still more ridiculous. Do labourers ever attend half so much to the price of provisions, as to the price of labour; and would not any such emigration produce at once four consequences sufficient to check its progress—a rise of provisions—and a diminution of wages in France—a rise of wages in England—and a diminution in the price of provisions? For the rest, we recommend to the author's attention a view of some facts, which demonstrate, what indeed scarcely required any proof, the unwillingness of artists to quit their own country, however oppressed by high prices, or even by heavy direct imposts, and scanty wages. It is not *from* Holland, but *to* Holland, that we have seen emigrations both of capitalists and artizans take place; yet in no country are profits so low, or taxes so high; in no state does the government share so largely the income of the people, or diminish the real enjoyments of the trader and the workman so grievously, in proportion to their gross profits and wages. 'After all that has been said' (Dr Smith observes *) 'of the levity and inconstancy of human nature, it appears evidently from experience, that a man is, of all sorts of luggage, the most difficult to be transported.'

In estimating the probable increase of manufacturing industry in France, our author allows a great deal too much for the influence of political superiority in forcing a market. He commits the same error, when he proceeds to consider the future augmentation of the French trade and fisheries. But, admitting that the power of the republic shall remain in its present state, and that her commercial and maritime resources are to be extended entirely by peaceable means, he contends that the circumstances of her situation are sufficient to operate a very rapid development of those resources.

The abolition of strict Roman Catholic discipline will increase the consumption of fish, by rendering it an article of luxury or cheapness, not a mark of penance. Instead of 2,500,000 quintals, formerly consumed in France, Spain, and Italy, there will now be a demand for three millions; and the supply of this (which he seems to assume France will possess exclusively) must maintain just 20,000 able seamen, besides young men and boys. In like manner, he allows 5000 able seamen for the 150 vessels which the Greenland trade will speedily employ, and so on for the other fisheries in proportion; estimating that 45,000 able seamen will be required in all for the fisheries alone, beside young men and boys, whom he calculates at an equal number.

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* Wealth of Nations, B. I. c. viii.

Now, admitting, that France shall suddenly become much more expert than England and Holland in fisheries, and in the carriage of fish, and shall thus engross the Mediterranean market, as well as supply her own home consumption, we think our author's calculations are here, as usual, made very much at random, and we know that in many points they are inaccurate. It would follow, for example, from his estimate of the whale fishery, that the vessels engaged in it required above sixty-six men each; whereas, the average of the crews in the British whalers, from 1798 to 1800, both inclusive, was only thirty-four; and if the French vessels are manned nearly at twice the expence, how is the blubber trade to be carried on in the face of British competition?—not to mention that he has assumed the creation of a French whale fishery in two years, nearly twice as extensive as the British whale fishery is at this moment. Our author applies the same species of arithmetic to the colony and coasting trade of France: He supposes, that the former will employ 50,000 seamen of all kinds. We know that the British colonies do not at present occupy above one fourth part of this number; and that the French colonies, in their most flourishing state, never employed above 33,000, although the vessels were manned on so expensive a scale, as to render the price of freight a great deal higher than it ought to have been. Altogether, he concludes that the French fisheries and trade will employ 120,000 able seamen, and about the same number of young men and boys. We have been thus minute in our remarks upon the first calculations in which the author indulges, that, after affording a specimen of his rashness in treating one very important branch of the subject, we may be at liberty to follow him more generally in the remaining parts of his speculations.

One very prevailing opinion, which occurs in various forms through these sketches, is the extreme danger to which England is exposed by St Domingo remaining in the possession of France. We extract the following observations upon this subject as new, and affording a fair average specimen of his style:

Of the numerous faults and blunders committed by the several parties concerned in the late revolutionary war, next to *Great Britain*, the government of America has made the most irretrievable. To enter into war, for the mere purpose of acting upon the defensive, is the most ridiculous of all political absurdities. Such parties generally receive more blows than they give; and in the end, they are spurned at by their friends, and despised by their enemies.

As the United States are situate, possessing an immense length of coast, a great number of mercantile ports, and the several provinces producing but little variation in their exportable commodities; to enable
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their rapidly increasing population to maintain a profitable intercourse with the rest of the world, a certain portion of the sugar-trade is indispensably necessary. A small settlement or two would be of little importance to America; nor can it be expected that this government will be satisfied with such. But how are they now to acquire any great possession?

‘ During her warfare with France, or at any time prior to the destruction of *Toussaint*, America might have easily secured St Domingo; a single proclamation, declaring that island an integral part of the federal republic, and an independent state in the union, would have instantaneously rallied both *blacks* and *whites* around her standard. And what had the United States to apprehend from France? *Caresses* and *attention*: but certainly no sort of danger.

‘ The acquisition of St Domingo would have been, both in a commercial and political consideration, every thing that America could rationally desire: it would have enabled the United States to carry on a wide, extensive, and profitable maritime trade; and, as it would have rendered the political and mercantile interests of America and Great Britain reciprocal and mutual, by securing the British possessions in the West Indies, it would have raised an insuperable barrier between the United States and their perfidious sister, the French Republic.

‘ The opportunity is now lost! The partial patriotism of her chief magistrate, has, to all appearance, deprived America, perhaps for ever, of becoming that conspicuous nation, which nature, and the spirit of her inhabitants, certainly designed her to be in a few years. The politics of the acting president seem to be guided by no other system, than the personal animosities of Mr Jefferson: he seems to bear malice against the British government; and that hatred is, with him, a sufficient reason to make America the unconditional dupe of the French Republic.

‘ St Domingo lost, the Americans have turned their views towards the island of Cuba; they consider the acquisition of that settlement, as the certain result of a quarrel with Spain, and they pretend to have already a plausible pretext to make a claim upon that forlorn monarchy. But will France, now *military* mistress of the gulph of Mexico, suffer to settle, under the lee of St Domingo, a power which might thereby become her rival in the colony trade? Certainly not; the very idea is repugnant to common sense. The Consulate may perhaps permit, and even encourage America to quarrel with Spain, with Portugal, or with Great Britain; but the Republic will reserve to herself the objects of their differences, as a pledge of their future tranquillity.

‘ Although the rulers of France know enough of the principles of sound policy, not to build the permanency of their government upon the caprice or partiality of temporary ministers; yet we see their leading system is, to manage the official and public men in other countries, so as to render their influence, ignorance, and credulity, subservient to the consolidation of the Consular Republic. The *Versaillian*

policy of the Consulate, being well seconded by a revolutionary audacity, and supported with energetic firmness, has contributed more than all the Jacobin armies of France, to subdue the corrupt and cowardly governments of other states. The Consuls have been remarkably fortunate in finding manageable men abroad, it is true, and it must be confessed they have known to make use of them; for should the governments of Europe and America hereafter see their errors, the Consulate has taken special care, that they shall not have the means to retrieve them. The French are now in possession of the whole island of St Domingo, with all their former settlements in that quarter, and Louisiana is ceded in sovereignty to the republic; so, in all probability, are the Floridas. With these possessions, she is indisputably mistress of the Gulph of Mexico; General Bowles and his Creek nations will soon become her auxiliaries; and she will either fraternize, or revolutionize the Southern States of America, already disposed to break up the Union.

‘These, we think, will in all probability be the consequences of President Jefferson’s short-measured politics.’ p. 30, 31, 32, 33, 34.

We shall very briefly point out a few of the various considerations which are here overlooked. In the *first* place, admitting that a proclamation might have secured the colony to America, she would have been involved in war with France upon West Indian territory, and would in all time coming have been implicated both with Britain and France in the same part of the world. *Secondly*, The jealousy of Britain must have been excited against a neighbour like the United States, independent and subject to none of the checks necessarily imposed on colonial dominions, extending herself in a quarter where the British settlements are peculiarly valuable, and, unfortunately, not less weak, than worthy of being retained. *Thirdly*, It is unlikely that France, after losing almost all her dominions in the West Indies, would be prepared (as our author thinks, p. 32, note) to unite with her natural enemy in preventing the farther progress of the new West Indian power. It is rather to be apprehended, that she would assist America in her designs upon the rest of the islands. *Lastly*, The author forgets in what state St Domingo has been for thirteen years; how long a period must elapse after the nominal restoration of the mother country’s authority, before a complete re-establishment of order and consolidation of resources can be effected; how heavy a burden the colony must in the mean time prove to every political movement; and how material a diversion its rebellious population will for many years create in all military operations which France may undertake in the Gulph of Mexico. He has argued as if that island were as peaceful as it is fertile, and as secure for defence, or for a point of attack, as any department of the mother country. While we agree with him, in wishing that France could, by any safe means, be

be deprived of the colony, we conceive that much less danger can result from her retaining it, than from its being transferred to the negroes, or even to the United States, possessed, as the federacy now is, of Louisiana. And even if France regains her authority in the island, we are convinced it must be for many years a pledge of peaceful conduct, in so far as its commerce and cultivation may be deemed valuable, and in as much as its internal organization must remain insecure.

From the commercial resources of France, our author proceeds to consider her prospects in a military point of view. After remarking that the national pre-eminence, acquired by accidental circumstances, such as the appearance of illustrious individuals, is necessarily short-lived, he inveighs against the 'invidious doctrine,' as he terms it, that a people, fighting in their own cause, are more energetic and effective, than a nation contending for lawful rulers. He maintains, that the rabble will always pass from one master to another; that national spirit is of no avail, without obedience to a chief; and that a country possesses military strength exactly in proportion to its population and means of subsistence. On this, it is obvious to remark, that the spirit with which a nation is animated, must always enter as an element into the calculations of the force which may be derived from its numbers and wealth. An undisciplined rabble is not, indeed, a very dangerous enemy, in whatever cause it attempts to act. But it is to be hoped that order may easily be united with zeal, and that the feeling of interest which inspires a multitude in a particular contest, may lead them to act against the enemy with the force derived from discipline, as well as the vigour that may be excited by the passions—may at once increase their spirit of subordination, and inflame their desire of conquest. We fondly cherish such hopes, more especially in the present crisis, because we conceive there is no other prospect of safety for England.

The natural advantages of France in a military point of view, our author conceives to be just twenty per cent. higher than those of any other continental territory equally extensive and populous. Austria, he allows, may, with a population of twenty millions, maintain a peace establishment of 260,000 men. And France, having thirty millions of inhabitants, must, by the proportion just now stated, be able to support an army of 450,000. By a similar application of his rule, he estimates the war establishments of Austria, Prussia, Sweden, Denmark, and the Germanic powers, at 760,000; of which 370,000 would be necessary for the internal arrangements of those states, while France could send beyond the frontiers an acting army of 390,000 men.

In point of revenue, her advantage is still greater. She can raise, by an average assessment of 15 per cent. on the national income, as much as all the other independent powers of the continent can procure by a burden of 30 per cent. The *data* by which this part of his calculation is supported, are peculiarly gratuitous and unauthorised. How can this man, or any man, tell, that the Austrian landholders pay altogether just 33 per cent. of their income, the cultivators or peasants 50 per cent., and the burghers 20 per cent.? We know that the Bavarian peasantry have generally been reckoned the most oppressed of any in the empire; and Mirabeau computes *their* burdens at only 44 per cent. of their income, estimating the latter so low as 5 per cent. on their stock. But we give almost as little credit to the one as to the other of these random valuations.

The military organization of France is described by our author as peculiarly well adapted to call forth the whole energies of the people. There are more than six millions able to bear arms, and two millions and a half of these are between eighteen and twenty-three years of age. No degree of rank or wealth exempts men from conscription; and this evil, so much inveighed against, is only hard upon the opulent and indolent part of the community. We doubt extremely if the conscription be practically of this universal and inspiring operation. If it be, the danger from the republican constitution is indeed imminent to the rest of Europe; but we imagine it must be short-lived in the same proportion. A state of things, more incompatible with internal stability and the developement of national resources, could not easily be figured.

The frontier of the republic, always strong, and flanked as it now is by the most advantageous works (Holland, Switzerland, and Italy), is considered by our author, and we think most justly considered, as formidable to all her neighbours in an unprecedented degree. Her colonies, however unnecessary to a nation possessed of such internal capabilities, are extremely important as stations from which Great Britain may be attacked in her tenderest point—her foreign settlements and trade; and as the means, also, of commanding either the property, or, if it shall be deemed more advantageous, the commerce of the Spanish and Portuguese territories in the New World. In Europe, we are told, that France may soon add a navy to her present enormous forces; but that her ships of war will probably be still found unequal to cope with those of Britain—and that most danger is to be apprehended from her light flotillas, not only in Europe, but in the colonies. Our author adds, that depôts are preparing along the north coast of France for 1500 or 2000 light vessels
always

always to be kept in readiness, and that the same system is to be extended to America and the West Indies. This we really believe was written during a period of apparently profound peace, and deserves some attention.

The remaining part of the speculations on France, is occupied with an inquiry into the line of conduct which she will probably pursue towards the only two powers which can now give her any trouble, Russia and England. The substance of our author's opinion upon this interesting topic, may be comprised in a few simple propositions.

1. France and Russia are the only powers in modern Europe that have acted systematically for any considerable length of time. (He seems to forget the whole history of Prussia.) The plans of Louis XIV. have now been completed; the dependence of Spain secured; the sovereignty of Holland acquired, and Austria greatly weakened. Between France and Russia there is only a frontier and a few neutral ports. The object of the former is to overcome the latter; and for effecting this, it will be enough if she obtains an ascendancy in the affairs of Turkey; a consideration which sufficiently explains her uniform repugnance to take any joint measures with Russia against the Porte. But,

2. France will begin by endeavouring to rid herself of all incumbrances which might hang upon her rear; and will, therefore, remain at peace with Russia, until she can secure the defensive inactivity of Great Britain. This she expects to command, by affording no points of attack, and by completing the ruin of our finances; an object easily attainable, she thinks, by forcing us to keep up expensive preparations, and by excluding us from the commerce of the continent.

3. Our author conceives the rupture of France and Russia to be the most fatal issue of the present crisis to the other powers of Europe. It must terminate in the universal sovereignty of either one or other of those overgrown states.

We shall now shortly indicate what appear to us the fundamental errors in all those dogmas. Admitting that France could reduce Britain to inactivity by the means above specified, it does not seem to follow that such inactivity would be more than temporary. As soon as the rest of the plan was attempted—as soon as France began to attack the rest of the European powers—Britain would be at full liberty to repay, as she has often before repaid, their cowardly or jealous backwardness in her cause, by making a diversion in their favour, and assisting them to repel the common enemy. But farther—Although we were to admit that Austria and Prussia are unable, by their union, to resist the power of France or of Russia, it would by no means follow, that they

they could oppose no barrier to her attacks upon Russia, or that they could not give a check to Russia, were she to form the design of penetrating into the west of Europe. And it is very evident, that while the existence of those states is continued, even if they are reduced to a subordinate rank, they must be ready to avail themselves of the rupture which may take place between the great eastern and western members of the federal commonwealth. Nay, such a rupture will even give the still more dependent branches of the community, the northern powers, Italy and Spain, the power of throwing off that yoke under which they at present groan. While Britain is attacking France, and while Spain, for example, shall be able to maintain a fleet of sixty sail of the line, according to our author's estimate (p. 65, note), is it not clear, that so important a state will find it easy to shake off its dependence at the first change of fortune which may attend the French arms? If, on the other hand, Russia should remain master of the field, can she at once retain her dominion over the enemy whom she shall have subdued, and forge chains for the allies by whose assistance she has conquered? We see no proof whatever in these 'Sketches,' that the present situation of affairs, dismal as it is in some respects, particularly in regard to the lesser states of Europe, will lead to a total dereliction of those sound and natural principles of policy which have hitherto preserved the independence of the chief nations in the European commonwealth.

We have one more remark to offer upon the unqualified license of calculation which our author uniformly assumes, whenever it is necessary for his argument, to exalt the probable force, or wealth, or energy, of either France or Russia. He thinks it sufficient to consider the natural advantages of those states, and to contemplate the tendency of such resources to expand in the course of a few years. He forgets that a proportional or a greater augmentation may in the same time be preparing in the other states for coping with the increased forces of those two powers; and that nothing is more likely to accelerate this temporary progress, than the very circumstance which renders it so desirable. This consideration is too obvious to require farther illustration. It is exemplified in the whole course of modern history; it is presented to us by a view of the comparative advances which the nations of Europe have made in all the branches of their wealth, their accomplishments, and their direct military power; it applies to every speculation in which our author has indulged—to his estimates of manufacturing and mercantile resources, as well as to his estimates of revenue and force; and it tends, in no small degree, to dispel the apprehensions

sions which his gloomy pencil might have raised in those who contemplate his very partial 'Sketches' of our political views.

II. The next object of attention is the Russian empire; and in this branch of his speculations the author has, in our opinion, displayed both more sobriety and more acuteness of thought. The introductory observations, however, bear the same marks of a presumptuous and hasty investigation, which we so frequently recognised in the former part of his work.

He lays it broadly down, that the interests of Russia (which form the sole guide of the government), are as little connected with those of other nations, as the court etiquette at Peking is with the ceremonies of the conclave at Rome. She has no natural ally. Her frontiers are

—'one half surrounded with an unnavigable ocean; six-sevenths of the other half are covered with Asiatic nations and wandering tribes, and mistress of the Baltic and Black Sea; the remaining part is inaccessible; that is, the space, we may say isthmus, between Riga and Oczakow, is the only frontier the Russian government has to guard; and Europe cannot organize a force that could now make any impression on that quarter. Were the hero of Marengo, with all his veterans, on the banks of the Boristhenes, it is by no means likely that he would risk, a *journée de Pultava*.' p. 108.

Instead of enumerating any of the various arguments which immediately suggest themselves to refute this strange doctrine—strange at least in the extent to which it is here pushed—we may only refer to the greater part of the speculations into which the author has himself entered in the preceding half of his work; more especially to the following passage, so singularly demonstrative of his detached and exclusive manner of viewing each part of his subject.

'In the present state of things, can Russia and republican France go mutual sharers in the trade and government of the Turkish empire? This is by no means likely; nay, we may venture to say, it is impossible. Which of the parties then is to give up its pretension? The cabinet of Petersburg must certainly know, that should the Consulate be allowed to assume an ascendancy at Constantinople, or to intermeddle in the affairs of Turkey, the fate of Moscow may again be disputed at Pultava!' p. 72.

We likewise find him roundly asserting, by some unaccountable mistake or caricature of the economical theory, that the inhabitants of any country who live by trade and manufactures, 'are not only themselves unprofitable consumers, but their subsistence and gains are taxes or burdens on the industry and consumption of others.' (p. 182.) 'The expence of this class in England is greater,' he adds, 'than that of the whole Russian army; but while the latter is now and then adding a new kingdom to the empire,

empire, the former are depressing the national spirit, and corrupting the morality of their country.'—This has certainly not even the paltry merit of a good paradox, and may be ranked with the author's own peculiar notions of the corn-trade or the land-tax.

The length to which our remarks have already extended, prevents us from entering into a minute discussion of the doctrines maintained in the dissertation upon the foreign relations of the Russian empire. Although we are very far from agreeing with our author in the conclusions which he forms on this important subject, we think he has stated them with some force, and, in many points, has argued the question with considerable plausibility.—Much of his reasoning is, however, founded upon facts which we have no opportunity of verifying; and the most important part of these facts, the assertions respecting the contraband trade of the neutral powers, consists of secret history, or allusions to private anecdotes, not authenticated by references to a single name. We entertain more than suspicions of his whole information with regard to the conduct of the British diplomatic affairs in the northern courts during the late war.

"Russia, our author maintains, has little or no interest in the commerce of Europe. Her immense resources are all internal and independent. With scarcely any frontier to defend, she has the most ample means of annoying both Europe and Asia. Great Britain cannot invade her sovereignty of the Baltic, without the co-operation either of Sweden or Denmark, all chance of obtaining which has been entirely lost, together with the good-will of the rest of the world, by the unjust and irritable conduct of the late administration. He inveighs with peculiar bitterness against the whole proceedings of Great Britain towards the secondary powers, and particularly those of the Baltic; and accuses her of first forcing them into the arms of Russia, and then wreaking upon their heads, that vengeance which she dared not vent against the Great Northern Empire. He draws a comparison between the conduct of Britain and France towards the allies whom they wish to gain over, and determines the preference clearly in favour of the latter.—He is decidedly of opinion, that Russia will soon make an attempt upon our dominions in the East; and recommends, in a very earnest manner, the acquisition of Brazil by this country.—All these topics, which we have only sketched with conciseness as the results, of his speculations, are illustrated at length, and many of them with much ingenuity. We particularly refer to his remarks upon the conduct of affairs in the Baltic; his statements respecting the difficulties, we fear the insurmountable difficulties, of repeating in that quarter the naval campaign of

of 1801, and, still more, of extending our attacks to the Swedish or Russian ports; and his observations on the means which Russia possesses of annoying our East Indian empire.

III. In the last part of these 'Sketches,' entitled, 'France and Russia,' we are presented with a view of the consequences which may result to great Britain from the continued alliance of those powers. It is obvious that such an inquiry must involve in a great measure a repetition of the previous speculations. We shall only notice, in a very general way, the substance of such of our author's conclusions as have not already come under our review.

He contends that the two great nations will endeavour to unite the East Indian powers against Britain, and encourage disaffection among the British and native troops; that they will in like manner seduce the West Indian colonists, by a promise of extending their market, and intimidate them by threats of underselling, or of conquering them; that they will prevent Great Britain from receiving supplies of grain either from Europe or America; spare no expence to create mutiny among our forces, and dissensions among our manufacturers; and carry on an unceasing war against our finances in every quarter of the globe. Such are the *indirect* and secret measures of hostility to which we shall be exposed; and in order to counteract them, several expedients are pointed out by this bold and ingenious projector. We must entirely conquer the native princes of the Peninsula; and, after consolidating our Indian empire by force, we must secure its future growth, as well as the continuance of subordination, by reforming the internal administration, destroying all the settlements of foreign nations, and abolishing the monopoly. We must at once secure our West Indian property and compel other nations to permit a free colony trade, by laying open the commerce of our own settlements. At home, we must cultivate our waste lands, abolish all premiums and bounties in the provision trade, and treat our forces with liberal attention; employing our land troops, during peace, in national improvements, and our seamen in the extension of the fisheries. He adds, that we ought perpetually to watch the operations of the enemy; and to consider every act of preparation, not instantly explained, as a ground of hostility. The other remedies for the injuries which our finances may sustain, are vaguely and unintelligibly stated.

The measures of *direct* hostility to which the alliance of France and Russia must expose this country, are next described. They consist, chiefly, in the formidable armament of above 230 sail of the line, between two and three thousand small craft, and 300,000 land forces, by which they will surround us from North Bergen

to Cadiz; thus hemming us in upon every side, and compelling us to concentrate all our strength at home; while they carry into effect their favourite purpose of dismembering the more remote parts of the British empire. In the Mediterranean a fleet of 67 sail of the line, with small craft in proportion, will be stationed to protect the south of Europe from our attacks, and to cover the projected descent upon our eastern settlements. In the west, our chief danger arises from flotillas and other light armaments. To defend this island, the author decidedly prescribes the plan of multiplying our naval stations on the east coast, and maintains that the system of blocking up an enemy in his ports, at all times extremely difficult, will be utterly chimerical in the juncture now under contemplation. The same object may, however, be attained with complete certainty, he thinks, by a fleet of 40 sail stationed between the Downs and Buchanness, at points where they may have good anchorage and proper sea-room. The security of our affairs in the East and the Mediterranean is to be commanded by the possession of Malta, or some such impregnable station between Toflon and the Dardanelles. The projects of the enemy in the West Indies are to be opposed, our empire there augmented, and our whole dominions, in every quarter of the globe, raised both in wealth and in military strength, by the acquisition of Brazil, or of some territory advantageously situated, and fit for the creation of a powerful army; and by maintaining, at the same time, a right intelligence with the United States upon the distribution of the larger islands.

On the many curious and important questions to which these various schemes give rise, we do not purpose at present to offer any remarks. We must, however, observe, that it would be unfair to judge hastily of several of them, which, like all projects of political change, when superficially viewed, and detached from the facts and arguments that lead to their formation, appear very rash and extravagant. It seems to us, on the contrary, that many very plausible speculations are suggested by our author in support even of what timid reasoners may be disposed to call his wildest projects. And we are convinced, that several important considerations, of which he seems not to have been aware, may be urged in favour of the extension of our colonial dominions, at least in the New World—a part of his theory which will probably startle most of his readers.

ART. IV. *Prize Essays and Transactions of the Highland Society of Scotland.* To which is prefixed, an Account of the Principal Proceedings of the Society, since 1799. By Henry M'Kensie, Esquire, one of the Directors. Vol. II. Edinburgh, Creech, Hill, and Constable. 1803. 8vo. pp. 556.

IN the account prefixed to the first volume of these Transactions, we are informed, that the objects of the Society are, 1. An inquiry into the present state of the Highlands and Islands of Scotland, and the condition of their inhabitants: 2. An inquiry into the means of their improvement: and, 3. An attention to the preservation of the language, poetry, and music of the Highlands. Before we proceed to particularize and to examine the papers which are contained in this second volume, it may not be improper to premise a few observations on each of these objects.

It is evident, that no regular and systematic plan of improvement can be laid down or pursued, until the present situation of the Highlands, and of their inhabitants, is fairly and fully ascertained. Those particular plans, indeed, which have been found to answer, in carrying on the improvement of other countries, may afford some general principles, which must be serviceable even in the Highlands; but this district of the empire differs in so many material points from every other, that the information which may be derived from the systems of improvement pursued in other countries, will either be too general, and consequently in a great degree useless, or, if adopted experimentally, will be found in many particulars inapplicable, if not prejudicial. We are therefore surprised that, in the two volumes which the Highland Society have published, there is only one very short and unsatisfactory paper on the obstacles to improvements in the Highlands. As we can entertain no doubt of the sincerity and zeal of the Society, we certainly expected, before this time, to have received, at their hands, a full, clear, and impartial account, not merely of the soil, climate, and produce of the Highlands, but also of those obstacles to their improvement, which are known to exist in the prejudices and indolence of the peasantry, and in the state of dependence or vassalage in which they are generally held by their tacksmen. It is absurd to expect, that the Highland peasantry will be inclined to take the trouble, and to run the risk of introducing the culture of wheat, rye, cabbages, &c. all of which are recommended in these Transactions, unless it be previously ascertained, from a fair representation of the soil and climate of their country, not only that they can be raised, but that they will be productive.

productive of more advantage than can be derived from any other mode of employing their ground.

With regard to the second object of the Society—an inquiry into the means of improving the Highlands, we apprehend, that they ought, at the very commencement of their proceedings to have applied themselves to the determination of a few general questions, and to have been guided, in their particular inquiries, by the results of such investigations. In this way, it appears to us, that they ought, first of all, to have ascertained, whether it would be better to extend the culture of *grain*, or to keep the Highland districts entirely in *pasture*; and if the propriety and utility of the latter measure had been determined, to have then discussed, whether the Highlands ought to be stocked with *black cattle* or with *sheep*. In the Appendix to the second volume, a premium is offered for the best essay on the introduction of sheep farming. If this question had been previously discussed with ability and fairness, with the assistance of full information respecting the produce and population resulting from the present agriculture of the Highlands, the pages now occupied with essays on arable husbandry, would have been more usefully filled with important practical observations on the proper breeds of sheep, and their management. It would not be difficult to prove, that by the introduction of the sheep husbandry, a much greater quantity of food would be raised at much less expence, and with much less labour or risk. The objection is strong, merely when it appeals to our feelings, or to our national partiality: it will not bear to be examined coolly and fairly. Even if we grant that the necessary consequence of the introduction of the sheep husbandry would be, that many of the Highlanders would be obliged to leave their mountainous districts, and seek employment in the low country, it may very well be doubted, whether this step would not be productive of great national benefit, even without the sacrifice of any real individual happiness. At present, the Highlands afford a scanty and precarious subsistence to a thin population. The Highlanders themselves are indolent, because they perceive that no exertion or labour can secure them a subsistence from their own soil. Under the sheep husbandry, the Highlands would produce subsistence for at least four times as many human beings as they now maintain, while their present inhabitants, if they could not be employed in their native country, might find an ample and much more useful field for their exertions in a climate and soil that would more gratefully repay them. There is great reason to believe, however, that these benefits might be obtained, without the expatriation of those individuals who still cling to their mountains with so affectionate

a partiality: if the sheep husbandry were introduced, and the fisheries properly managed, there would be employment for many more people than the Highlands now contain. The introduction of sheep would supply the raw material for the woollen manufactures; and the immense quantities of peat, and the powerful waterfalls that abound in all quarters, would support machinery at little expence. Such a system would also be of service to the other parts of the empire. At present, some of the finest counties in England are almost entirely in pasture, though no doubt can be entertained that they are well suited for raising grain, and that, if thus employed, they would afford subsistence to a much greater number of inhabitants than they now do. If, therefore, the Highlands produced that quantity of animal food which these counties do at present, the latter might, by becoming chiefly arable, increase the population of the country. It is necessary, no doubt, that there should be a certain proportion of every farm devoted to the feeding of cattle, in order that manure may be supplied for the arable part; but, perhaps, it would be for the advantage of the kingdom, if those districts which are suited to the raising of grain, should have no more than that proportion set apart for the feeding of cattle—and if those which, from their soil, situation, or climate, were unfavourable to grain, should be principally set apart for the purposes of pasture. Another regulation, not unconnected with our present subject, may be suggested; that manufactures, in order that they might interfere as little as possible with agriculture, should, in general, be established in grazing districts, where few hands are required by the farmer. We apprehend that none of our readers will consider these remarks as foreign to the present subject, whatever opinion they may entertain of their justness; as, certainly, in every attempt to improve the Highlands, it ought to be recollected that they form but a part of the empire; and every plan or suggestion ought to have reference to them, not as a separate whole, but as a dependent and connected part.

The third object of the Society—an attention to the preservation of the language, poetry, and music of the Highlands, we consider as in a great degree incompatible with the introduction of improvement. A difference of language not only presents a formidable barrier to the introduction of useful knowledge, but must also tend to perpetuate those prejudices which it is absolutely necessary to destroy, before any general or permanent improvement can take place. Every method, on the contrary, ought to be taken to identify the Highlander, in language and manners, with the other inhabitants of the empire; and his

prejudices, already very strong, ought not by any means to be cherished and continued. As the most effectual plans of improvement must, in the first instance at least, depend in a great measure upon strangers, every obstacle which is presented by a difference of language and manners, and by the powerful prejudices which the Highlanders entertain, ought to be done away as speedily and completely as possible.

We have been induced to offer these preliminary remarks from a firm conviction of the importance of the ultimate object which the Society has in view, and from a wish that they may, in all their proceedings, clearly perceive it, and pursue it by the most direct and effectual means. We shall now proceed to examine the several papers which compose the second volume.

The first paper is entitled 'An Essay on Peat, by the [late] Rev. Dr Walker, Professor of Natural History in Edinburgh.' This essay, consisting of 136 pages, contains much useful and curious information, conveyed in a very loose and desultory manner. That part of it which relates to the chemical analysis of peat, is very inaccurate and incomplete. The reverend author appears to have been well acquainted with chemistry as it existed in the middle of the last century; but either to have entirely neglected, or to have learned very imperfectly, the important discoveries that have been made in that science by the labours of the last twenty years. It is evident, however, that whoever attempts to ascertain the chemical principles of vegetables, ought to have made himself perfectly acquainted with the pneumatic chemistry, and the analysis of volatile products. At the same time, it must be confessed, that the following observations of Dr Black, contained in a letter to Dr Walker, and given by him in a note to this paper, are perfectly just and correct.

'The process hitherto named the chemical analysis of vegetables, cannot be considered as an analysis now, (since the discoveries in pneumatic chemistry). It is to be viewed as a distinction, by which the natural combination of their principles is undone, and these principles enter into new combinations, very different from those that took place in the vegetable matter. In the uncorrupted vegetable matter, these principles are united together with an arrangement and connexion, of which we have not the smallest knowledge. We only know, that it is easily destroyed by heat and by putrefaction, which produce new arrangements and combinations of these principles; and thus form compounds endued with particular qualities, which did not exist in the vegetable matter before.' p. 23.

Among the inaccuracies into which the learned Doctor is betrayed, by his inattention to these particulars, we need only specify the following. At p. 24. he says, that '*calcareous earth* is

is known to promote the putrefaction of animal and vegetable substances; and that the peat of Lismore is very putrid, in consequence of its mixture with the limestone of the island. Now if, by calcareous earth, the Doctor means carbonate of lime, he is mistaken in asserting that it promotes the putrefaction of vegetable and animal matter. If he means quicklime, the instance he adduces is not to the point, as the limestone in the island of Lismore is certainly the carbonate of lime. Besides, in p. 55, he asserts, not very consistently, that no degree of putrefaction in peat earth could be discovered from the mixture of either mild or caustic lime.

The Doctor asks (p. 31.) why we should omit azote as one of the essential elements of plants, as they all afford volatile alkali on putrefaction. The fact is, that no vegetable substances, except the gramineous and cruciform plants (*tetradynama*) afford ammonia on putrefaction.

After having enumerated and explained the properties of peat as a soil, the Doctor proceeds to consider what plants ought to be cultivated in it. We have already given it as our opinion, that the arable husbandry is not suited to the Highlands; and we think that the peat, there, would be most advantageously employed as fuel for manufactures or for lime-kilns: the Doctor's observations, however, may be useful to those Lowland proprietors or tenants who possess peat, though even by them, in most cases, peat would be more profitably employed as a manure than as a soil. Where it can be advantageously used as a soil, we would recommend the red oat, in preference to the Friesland, or indeed any other kind. The Doctor seems inclined to think, that bean crops would answer on mossy soils, as the root of this plant goes deep, and requires a soft soil but it is well known, that in a soft soil, the bean, though luxuriant in straw, is by no means productive in seed, and would be found a very improper crop for mossy soils.

In the fourth division of the Doctor's essay, and in the second paper in this volume, by Lord Meadowbank, 'On making compost dunghills from peat moss,' very clear and full directions are given for this application of peat; and from the results obtained by Lord Meadowbank, in particular, after repeated and careful experiments with this compost, we think no farmer will hesitate to employ his peat rather as a manure than as a soil.

The third paper, 'On burning lime with peat, by Mr Jonathan Radcliff,' presents a very clear detail of a process, by which peat may be used to supply the want, or to prevent the consumption of coals in lime-kilns.

The next essay, 'On the cattle and corn of the Highlands, by Dr Walker,' is divided into five sections. In the first section it is admitted, that the crops of oats and bear (big) are often much damaged by bad seasons; and that 'the mildness of the climate on the coasts of the Highlands in winter, is greatly overbalanced by the want of those degrees of heat in summer, which prevail in the south, by a less early autumn, and by the frequency and violence of the winds and rain.' (p. 157.) Surely these circumstances point out the impropriety of endeavouring to extend the arable husbandry in these districts, and the necessity of effecting an entire and radical change in the system of improvement. The Doctor must certainly be mistaken in affirming, that the bear usually yields between ten and fifteen fold, notwithstanding the badness of the climate and the wretched state of husbandry. Unless, however, the quantity of seed be specified, this mode of ascertaining the produce is very vague and uncertain.

We should not wish to offer any stronger and more decisive facts to prove the necessity of removing black cattle, and substituting sheep, than those contained in the second section of this essay, 'On the state of the Highland cattle during winter.' Green crops, or grasses proper for hay, can never be raised in such certain abundance, as regularly to supply the cattle from the 1st of February to the end of April, if the Highlands, in general, were to be stocked with them. Some spots, no doubt, might be found, in which winter food, and consequently black cattle, might be introduced with advantage; but in hilly countries, and in a climate where the making of hay must be so very precarious, sheep ought, in general, to be preferred.

The plants recommended by the Doctor in the third section, are very proper for such spots in the Highlands as ought to be tilled, or kept in hay; and several of them might be advantageously cultivated in the Lowlands.* Besides those enumerated, we would recommend to the attention of all farmers, who are possessed of a light sandy soil, the corn spurrey (*spargula arvensis*.) This plant is much cultivated in Brabant, Holland, and Germany, and is found to be a very nourishing and acceptable food to cattle, both when green and when made into hay.

The turnip was introduced into Sweden from Lapland, and not from this country, as the Doctor affirms; who, moreover, seems to confound the turnip-rooted cabbage with the Swedish turnip. Nothing can prove more clearly, that the Doctor paid but little attention, to the soil and climate of the Highlands, than his indiscriminate recommendation of beans and peas, wheat, and the Tartarian oat. By his own account, clay is rarely to be found in these districts; and the most common soil is a hazel mould, often

often participating largely of sand and gravel. Beans, therefore, we should think, are absolutely inadmissible. Tartarian oats are more apt to be lodged than any other kind, and are therefore improper in a climate so windy and wet. Peas, which answer well in England, are, in general, very uncertain and unproductive, even in the south of Scotland. Wheat is entirely out of the question. In whatever parts of the Highlands the arable husbandry can be followed, the following crops and rotation may, from their having succeeded in situations and a climate very similar, be safely recommended. 1. Turnips, or potatoes drilled; 2. Bear, or, *perhaps*, the common Scottish barley; 3. Grass seeds, consisting of clover and rye grass, or any other of the numerous grasses, which might be found to suit the climate and soil; and, 4. Red oats.

It is absurd to imagine (p. 202.) that seed corn brought from Norway would ripen in as short a space of time in the Highlands, as it did in its native country; since the essential circumstance is wanting in the Highlands, which accelerated its growth, viz. the very great difference between the temperature of the summer and that of the winter, and the sudden and permanent change.

The two next essays, by Alexander Macnab and Duncan Stewart, containing 'Observations on the economy of black cattle farms under a breeding stock,' appear to be written by persons of much practical information, which is conveyed in a plain and perspicuous manner. The catalogue of diseases, to which the Highland cattle are liable, presents another powerful argument, why sheep should, in general, be introduced in their place; as we are informed by Mr Macnab, that 'the distempers incident to Highland cattle, result chiefly from scanty feeding and want of water in winter.' Now, it is well known, that sheep will live and fatten, where cattle would starve, and that they require very little water.

In the seventh Essay by (the late) Mr Somerville, clear and decisive answers, founded on careful observations, and direct and repeated experiments, are given to the inquiries—'What are the stages of growth and ripeness, and what are the peculiar states of the weather, and other circumstances, in which corns, particularly oats, are rendered unfit for seed, by frost, or considerable degrees of cold, and by what changes or modifications of these stages, states or circumstances, do the powers of vegetation remain unhurt? Will oats, that are ill-filled, or ill-ripened, serve for seed; and, by what appearances, can the point of distinction between the good and the bad be readily ascertained?

In the 'Observations on the obstacles to the improvement of the Highlands,' the author particularly notices the distance, at which many of the factors (stewards) reside, and their consequent ignorance of the improvements which particular districts may admit or require;—the numerous commons;—and the advantages which would result from long leases, and from raising plantations on the barren hills and moors.

Mr Somerville, in the Ninth Essay, recommends the total eradication of heath, where the soil and climate will admit the cultivation of any more useful plant; and the burning of it in such a manner, as to destroy the tough, hard parts, and to afford room and nourishment for the tender and juicy shoots, in every situation where no plants of greater value can be produced. In order to effect the former purpose, the heath ought to be burnt in the autumn when it is in flower, as it may then be completely destroyed. But, when the object is to preserve the root, and to afford warmth and manure to the tender shoots, the operation ought to take place in the spring. The tender and juicy shoots, which might thus be made to spring annually from the burnt heath, ought to be used not only for pasture, as Mr Somerville directs, but also for hay. In Sweden this practice is commonly followed, and found to answer.

Mr Angus M'Donald, in his paper 'on manufactures,' offers some judicious observations on the linen and woollen manufactures of the Highlands;—points out the advantages, which they enjoy in those respects;—and suggests several different modes, in which they might be improved and extended. We perfectly agree with him, that the Highlands might, by proper management and encouragement, become the seat of valuable woollen manufactures; but we imagine, in that case, that the raising and manufacturing of flax would be generally given up, as comparatively uncertain and unproductive. We are surprised that he should lay it down, as 'a fundamental maxim in commerce, that no manufacture can be firmly established in a country which does not produce the raw materials which it employs,' p. 242. What manufacture is more firmly established, and the source of employment and wealth to a greater number of persons, than the cotton manufactures of Lancashire and Glasgow? In direct opposition to what he says, respecting the profit arising from bees, we can positively affirm, that they are unprofitable in a climate much more favourable than that of the Highlands, p. 249.

The two next papers contain 'the plan of an inland village, by the Reverend Robert Rennie; and remarks on the plan, by Colonel Dirom.' This plan, if altered according to the suggestions

gestions of the Colonel, would certainly be well calculated to secure health, cleanliness and convenience, all of which are very much neglected in the villages of Scotland:—but, till manufactures are established, it seems premature to be either building or planting villages. We entirely agree with Mr Rennie, that in a manufacturing village, it is much better that every feuar (every person who pays a ground rent) should only have half as much as he might wish to have, than a single rood too much, p. 262. Where manufactures are introduced, the division of labour ought to be as complete as possible; but if every manufacturer possesses an acre or more, either his ground or his professional business must be neglected; and, if he hire the labour of another person, the produce of his land will most probably cost him more than its real value.

In the ‘Extracts from an Essay on the Natural, Commercial, and Economical History of the Herring, by Dr Walker,’ we meet with almost all the facts which are known respecting the natural history of this fish;—a very long and tedious historical account of the herring fishery from its commencement in the fourteenth century to 1786;—and an enumeration of the causes, which, in the opinion of the Doctor, have lately rendered this fishing so unproductive. One of the causes, it seems, is our injudicious imitation of the Dutch, in fishing with large vessels: we, on the contrary, are disposed to coincide with Mr Headrick, who maintains, in a paper which will afterwards be considered, that if these large vessels were employed by us, as the Dutch employ them, in fishing in the open sea, herrings might be taken during more months, and at a time when they are in the highest perfection. The busses, at present, to which alone the bounty is given, are employed only in the lochs; and, when a shoal of herrings appear, send out their boats in such numbers, and with so much confusion, that they are both in a great measure unsuccessful themselves, and prevent the crews of those vessels which, on account of their small size, are not allowed the bounty, from attempting to fish at the same time.

We are strongly disposed to question the policy of granting any bounty: but if it be continued, it ought to be given to the busses, on the express provision, that they go out into the open sea, and there follow the Dutch mode of fishing; perhaps a similar bounty ought to be given to undecked vessels, which alone ought to be allowed to continue in the lochs. The method, which has been long practised near Gottenburgh, and which, on a smaller scale has lately been successfully adopted on the Fife coast, would most probably answer in the Highland lochs. In the neighbourhood of Gottenburgh, eight boats, each con-

taining two or three fishermen, draw one large net, enclosing a shoal of herrings, into a creek or small bay, and the fish being shovelled on the shore, the boats resume their work. The advantages of this mode, over that commonly practised, are evident and important.

We are surprised that only conjectures are offered on the food of the herrings. As the food soon becomes imperceptible in their stomachs, from their strong digestive powers, it is indeed impossible to ascertain all the kinds: but it is well known, that a small species of crab, the *cancer halecum*, which abounds in the north seas, is devoured by them in great quantities.

We consider it necessary merely to notice and to recommend the two next papers 'On the different sorts of herrings which frequent the coasts of Scotland; with observations on the present mode of conducting the herring fishery, by Mr M'Kenzie;'—and 'An account of the Dutch herring fishery, with the placart of the states of Holland respecting it.' The latter paper ought to be circulated as widely as possible, and followed as closely as a difference of circumstances will admit.

In the four papers 'On the Natural History of the Salmon, by Dr Walker, Mr Mackenzie, Mr Morrison, and Archibald Drummond, Esq.' the facts and conjectures brought forward are, in general, rather curious than useful in a practical point of view. This observation applies principally and most strongly to Dr Walker's paper, which is characterised by the same faults, as those papers of his which we have already noticed. It is full and minute, even to tediousness, in that part which can be interesting only to the naturalist; while it is defective, or merely conjectural, with regard to those circumstances which may be useful to the salmon fisheries. As the Doctor appears to have derived most of his information from books, and, in some instances, to have carelessly received it from the unexamined and uncompar'd testimony of others; it is no wonder that he not only differs from the other gentlemen, but advances what reflection might have taught him could not be the fact. In page 94th, he describes the ridge which is raised by the salmon over the place where they deposit their spawn, as from 'three to five inches high.' Now, it is evident, that as this deposition always takes place where the stream is rapid, the ridge and the spawn would soon inevitably be swept away. Mr Drummond, (whose essay fully deserves the character given of it by the editor, p. 394. note), rectifies this mistaken notion, (in which, however, the Doctor is joined by all those naturalists who read, rather than observe and examine), and expressly asserts, that the gravel, under which the spawn is deposited, is always levelled with

with a wonderful nicety (p. 402). If Mr Morrison be correct, in asserting that the operation of spawning lasts eight or ten days (p. 390), we should be inclined to dissent from the commonly received opinion, that the spawn is laid all together in holes, and then covered with gravel, since, if it were left so long uncovered, it would necessarily be carried away by the stream. Some naturalists have been induced, from careful observation, to maintain, that the spawn is not covered up at all, but suffered to float down the stream till it naturally sinks to the bottom.

As it is of the utmost importance to know all the animals which are destructive to the salmon, the porpus (*delphinus phocaena*) and the seal (*phoca vitulina*) ought to have been mentioned by Mr Drummond (p. 409). The former is often seen cruising across the mouth of the Tweed, and not only destroying the salmon, but preventing them from entering the river. The latter sometimes pursues the salmon a considerable way up the river: they are also equally inveterate and destructive enemies of the herring.

Mr Melvill, in his paper 'On the Fisheries of Scotland,' recommends that the mode of fishing for cod and ling pursued by the English and Dutch, should be adopted by the Scotch. The single, undoubted, and glaring fact, that the former nations, by their superior ingenuity, carry away immense quantities of these fish, from the very coasts of the latter, proves the propriety of this admonition. The remarks already offered, make it unnecessary to analyse or examine the latter part of this paper, which relates to the herring fishery.

The Rev. James Headrick, in his paper 'On Improvements in the Highlands,' appears carefully to have examined the country, before he offered his suggestions. They are, therefore, much more worthy of attention, than the crude ideas and fanciful speculations of those, who have no accurate or practical knowledge of the state of the country. The last section of this essay offers to our view a very probable source of employment and wealth, and, perhaps, the most proper application of the vast quantities of peat, in the Highlands. Mr Headrick proposes, that an experiment should be tried, to ascertain 'whether charred peat might not answer as well in rendering iron malleable, or in converting it into steel, as charred wood,' (p. 466). If it were found to answer, iron-stones and bog-ore of iron might be obtained in great abundance in many parts of the Highlands. We have already expressed our doubts, how far the raising and manufacturing of flax or hemp, which Mr Headrick recommends, would be practicable in the Highlands, or desirable, after the woollen manufactures were firmly and generally established. We
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do not perceive how it can 'have been clearly demonstrated, that the mode of occupying land, which renders it capable of yielding the greatest rent to the proprietor, is also most beneficial to the public,' (p. 455). Pasture land, in many parts of the kingdom, yields as much rent, as arable land, to the proprietor; and yet it cannot be considered as equally beneficial to the public; since an acre under tillage will support many more people than an acre in pasture. The propriety of converting the Highlands into sheep walks, ought not to be rested on this principle, which is not only in many instances false, but will always be regarded with a suspicious eye by the bulk of mankind. No doubt, when it is applied to the Highlands, it is perfectly true, since a sheep farm, producing subsistence for 100 people with the labour of ten, which, while under tillage, or stocked with cattle, could not support thirty people, though they all laboured on it, must of course afford a higher rent to the landlord, and benefit the public in a still greater degree; as the labour of the twenty spare hands may be rendered more profitable and successful.

The last paper contains an 'Account of the Culture and Produce of a field of Potatoes in the vicinity of Leith,' communicated by James Bell, Esq.

The 'Account and Description of the Manner of Preparing any ordinary Ship's Boat, so as to render it in the highest degree useful in Preserving Lives in cases of Shipwreck, by the Rev. James Bremner,' contained in the Appendix, promises to be of great utility; as the Society, after having received a very favourable report of the boat from several competent judges, who examined and tried it, have directed copies of a description and delineation of it to be sent to the different sea-ports of Scotland.

On the whole, we consider the Dissertations on Rural Economy, which occupy a great part of this volume, as almost entirely inapplicable to the state of the Highland districts, and unnecessary in the other parts of the kingdom. More full, accurate, and impartial practical information must be obtained, before any general or permanent system of improvement can take place in the Highlands. The prejudices and indolence of the peasantry, and the feudal interests of the landlords, must not be suffered to interfere in the smallest degree. If work cannot be found for the former in their native country, it will be much better for the public, and ultimately for themselves, that they should go where it can be found, than that they should continue to exist and multiply in indolence and wretchedness at home, neither able to support themselves, nor willing that others should take their place. But we apprehend no removal would be necessary: The sheep husbandry would bring in with it manufactures, and, consequently, villages and towns; which

which it is vain for the Society to plan, or the proprietors to build, (except on the sea-coast for the encouragement of the fisheries), while the present system of husbandry is followed. The landed interest ought certainly to consider the increase of rent which the sheep husbandry would introduce, as a sufficient compensation for the loss of their feudal honours, power, and attendance.

If, beside an entire change in the system of husbandry, the fisheries, and the manufactures of woollen and bar iron were properly established and regulated, the Highlands, instead of being thinly peopled with an indolent and wretched race, would become the abode of industry and comfort, and support an increased population, not only in its own mountainous districts, but over every part of the empire.

ART. V. *A Comparative View of the Public Finances, from the beginning to the close of the late Administration.* By William Morgan, F.R.S. Second Edition. With a Supplement, containing an Account of the Management of the Finances to the present Time. London. Longman & Rees. 1803. Svo. pp. 115.

SUCH of our readers as interest themselves in the financial affairs of Great Britain, must be well acquainted with the writings of this acute and diligent calculator. The tract now before us, may be considered as a continuation of his 'facts,' published in the year 1796. The object of both these performances, is to substantiate the charge of extreme profusion of the public money against the late Chancellor of the Exchequer; and, in both, nearly the same mode of demonstration is adopted. Our author details the various *items* of the national expenditure—the loans negotiated for providing supplies—the differences between the sums received and the debt created—the permanent addition to our public burdens in consequence of the augmented debt—and the slowness of the process of liquidation, when compared with these augmentations. He lays before us a full view of all those circumstances of loss and burden, and compares their extent, during the last war, with their extent during the Seven-years war, and the American war. He finds that the amount of the losses incurred, and burdens imposed in consequence of the financial operations which the late contest rendered necessary, exceed in a very great proportion the similar losses and burdens entailed upon the country by the two preceding wars, even after all due allowance is made for the different durations of the hostilities in the three periods; and he infers, that the ministers under

under whose auspices such operations were carried on, are entitled, beyond any former administration, to the appellation of extravagant; that the late war has been ruinous beyond all previous example; and that the accumulated burdens of this country have now brought it to the very brink of destruction.

It is by no means our intention to follow Mr Morgan through all the statements by which he supports these general positions. We shall, however, endeavour to exhibit a short abstract of the results of his calculations, which are formed apparently with great accuracy, and are certainly detailed in a very distinct and luminous manner. We shall then state the general objections which we have to urge against the conclusions which he has thought proper to found upon these premises.

I. The chief expences of a war establishment, are those of the army, navy, and ordnance. The average amount of the annual charges referable to these heads during the five years of war from 1755 to 1759 (both inclusive) was somewhat less than 8,800,000*l.*; the greatest expenditure in any one year was above 13 millions; and the whole actual expence of that period, exceeded the whole estimated expence in the proportion of 1.43 to 1 nearly. The average amount of annual charges during the five years of war from 1778 to 1782 (both inclusive) was somewhat less than 17,600,000*l.*; the greatest annual expenditure about 21½ millions; and the proportion of the whole actual, to the whole estimated expences, nearly that of 1.76 to 1. The average of the annual charges during the five years of war from 1793 to 1797 (both inclusive), was above 25,800,000*l.*; the greatest yearly expenditure, about 29½ millions; and the proportion of the whole actual, to the whole estimated expences, that of 1.92 to 1. In the five years from 1798 to 1802 (both inclusive), the average yearly expenditure was above 29,400,000*l.*; the greatest annual expence upwards of 34 millions; and the proportion of the whole actual, to the whole estimated expences, that of 1.27 to 1 nearly.*

II. In order to defray these extraordinary expences of the war establishment, loans to a great amount have always been required. During the Seven-years war, from 1756 to 1762 (both inclusive), 48,600,000*l.* were raised in this way; during the American war, (1776 to 1782, both inclusive), 57½ millions were borrowed; during the first seven years of the late war, 141 millions, exclusive of the Imperial loan; and, during the three last years, nearly

* In the extraordinaries of this period, are reckoned various subsidies, viz. the Imperial, Russian, Portuguese, and Bavarian, which are all charged to the army extraordinaries.

nearly 76 millions were raised in the same manner. When these vast sums were borrowed, the credit of government was almost always so low as to render necessary the creation of a considerable fictitious capital of debt. In this way, the country, in consequence of its difficulties, and of the scarcity of capital, came to be loaded with a debt much greater in amount than the money really received from the lenders; that is to say, it became bound to pay interest for more than they actually advanced, and could only redeem the principal at par, by paying the whole nominal amount. Calculating the annuities according to their value at the period of their commencement, the difference between the funded debt created, and the money received, was, during the Seven-years war, near $9\frac{1}{2}$ millions; during the American war, near 29 millions; during the first seven years of the last war, about $77\frac{1}{2}$; exclusive of the loss on the Imperial loan; and during the last three years of that war, above 39.

III. For paying the interest and other yearly expences of the debt thus contracted, various permanent taxes have become necessary, besides those extraordinary contributions which were levied during that part of the last war when an attempt was made to raise the supplies within the year. The burdens imposed in consequence of the debt incurred during the Seven-years war, amount to above 1,900,000*l.*; the American war added nearly $3\frac{1}{2}$ millions; the seven first years of the last war rendered an increase of nearly $6\frac{1}{2}$ millions necessary; and the three last years of the war entailed upon the country a farther load of above 2,900,000*l.*; not including the income tax, upon which upwards of 56 millions were secured, and the repeal of which rendered new permanent taxes requisite; so that the permanent addition made to the public burdens by the loans of the seven first years of the late war, may be reckoned at above $7\frac{1}{2}$ millions, and the addition occasioned by the three last years, at more than $3\frac{1}{2}$ millions.

We shall now endeavour to exhibit, in the form of a Table, a comparative view (according to the foregoing details) of the expences, debts, and public burdens which have been occasioned by the three last years; assuming the statements for the Seven-years war as unity, except where a proportion is given.

**A GENERAL TABLE OF THE RELATIVE EXPENCES OF THE THREE LAST WARS,
the Expense of the Seven-Years War being taken as Unity.**

Effects of War establishments.	Seven-Years War.		American War.		Late War. From 1793 to 1802 (both inclusive).		
	End first Year.	Seven Years.	Five first Years.	Seven Years.	Five first Years.	Seven first Years.	Three last Years.
Average annual expense of army, navy, and ordnance	1.000	—	2.000	—	2.944	3.340	—
Greatest yearly expense of ditto	1.000	—	1.634	—	2.250	2.615	—
Proportion of actual to estimated expense of ditto	1.43:1	—	1.76:1	—	1.92:1	1.27:1	—
Total of money borrowed	—	1.000	—	1.187	—	—	2.900
Difference between money received and debt created	—	1.000	—	3.052	—	—	8.131
Taxes occasioned by debt contracted	—	1.000	—	1.705	—	—	3.947
Total increase of the funded debt	—	1.000	—	1.487	—	—	9.772
Columns	I.	II.	III.	IV.	V.	VI.	VII.
							VIII.

This Table condenses the whole argument which can be drawn against the late war, and the financial operations that accompanied it, from contrasting its expences with those of the glorious contest which gained America and India, or with those of the disastrous struggle which deprived us of half our foreign dominions, and shook the whole empire. By comparing columns I, III, V, and VI, an estimate is easily formed of the relative effects produced by the three wars, during the same period of five years; a comparison of columns II, IV, and VII, exhibits the relative effects of the wars during the same period of seven years; and the VIIIth column continues the comparison through the last three years of the late war. All Mr Morgan's accusations against the late administration, derived from comparing it with former ministries, are therefore comprehended in this Table; while the whole case is thus brought forward, as well as the part favourable to his side of the question.

'From these statements (says our author) the predecessors of Mr Pitt, by a system of progressive extravagance, appear, during the course of a century, to have accumulated a debt of two hundred and thirty-two millions, which their more prodigal successor, in seventeen years, has increased to more than five hundred millions. Compared, therefore, with those of the late minister, how weak and contemptible are all former exertions! The mass which, in other hands, required one hundred years for its formation, has, under his management, been doubled in one twentieth part of the time; and the nation, long accustomed to regard the approach of the debt to one hundred millions as an approach to certain bankruptcy and ruin, have been led, by the experience of his administration, to believe that public credit is almost as boundless as ministerial profusion. Besides the addition of three hundred millions to the funded debt of the kingdom within the last eight years, a further sum of six millions Sterling has been annually raised, from the year 1798, by triple assessments, voluntary contributions, income-tax, convoy duty, and other measures of finance, equally new and extraordinary. Had these enormous sums been procured, like the rest of the supplies, by the usual method of a loan, it would have appeared that the expenditure of the present war had already added above three hundred and fifty millions to the capital of the Public Debt, or one hundred and twenty millions more than all the wars that have desolated the country since the Revolution.' p. 13, 14.

The means by which the late ministry were enabled to borrow such vast sums, and to provide for the interest of the loans, are discussed by Mr Morgan in a superficial and partial manner. The negotiations of loans could not, he thinks, be facilitated by the opulence of the nation, nor by the state of its credit, since the poor-rates have been rapidly increasing, and the funds have been lower than in any former period of our history. As soon as
the

the terms of borrowing began to rise considerably, various expedients were adopted for raising great part of the supplies within the year. During three years, extraordinary burdens were imposed, in the form of triple assessments, voluntary contributions, and income tax, until the whole of the new system of finance being found inadequate, and the calculations of its productive powers being completely disappointed, recourse was again had to the funding system; and this has been revived with increased vigour, partly in consequence of the relief given to the funds by the new measures of the former years, but principally in consequence of the suspension of specie payments at the Bank of England, which enables that body to assist speculators with unlimited credit, and of the disastrous state of trade which turns an unnatural proportion of the national capital into the public funds. He roundly ascribes the stoppage of bank payments to the exportation of specie occasioned by the foreign loans and subsidies. The means adopted for providing the interest upon the new loans, have been taxes which are chiefly productive during a season of war; and many of them have already failed in supplying the requisite sums. If, before the peace, those imposts presented a deficit of half a million, our author predicts that more than eight times this sum will be wanting after the war is concluded. With respect to the surplus of the consolidated fund, a full and clear statement is given of the effects which the war produced upon that part of the resources; and it is proved, we think, with sufficient precision, that Mr Pitt's estimates of the increase were generally much above the truth. According to our author, it would appear that, during several years of the war, the statement of certain sums as arising from the surplus, was only a transference to the same amount from monies raised by loan, or, in other words, certain sums were borrowed and applied in defraying the charges upon the consolidated fund, in order to be stated as a surplusage in the produce of that fund. He admits, however, that in the earlier part of the war, the real surplus was considerable, at one time even much greater than its average amount during the previous years of peace. As to the state of the fund during the present administration, our author declares that it is almost impossible to comprehend this or any other part of the finances, from the great obscurity and confusion which prevails through the whole revenue department. Several examples which he gives are, if accurately stated, sufficiently demonstrative of this severe charge.

“In short,” he observes, “the further we proceed in investigating the statements given of the public finances, the more we shall find the difficulty

difficulty increase of obtaining any satisfactory information from them. I do not know, indeed, that these accounts were ever remarkable for their perspicuity, or for according with each other. But what was formerly perplexed is now rendered unintelligible; and the task of thoroughly understanding the present system of finance, is become as hopeless as the attempt to reform it.' p. 95.

We have now laid before our readers the substance of the grounds upon which Mr Morgan accuses the late administration of unexampled profusion, and predicts the ruin of the finances from the disasters entailed by the late war on our national revenue. Without entering into a minute detail of the objections that may be urged against his statements, we shall proceed to point out, as briefly as possible, the general defects which we perceive in the chain of his argument, more especially in that very important link of it, which connects all his calculations and facts with the conclusions they are made to support.

In the *first* place, admitting the general method of reasoning to be correct, which our author adopts, it may be observed, that the case made out against the financial operations of the late war, by the comparative view formerly given, is far from being so strong as he would have it to appear. The argument, in this point of view, appears to be, that all the disastrous consequences of the Seven-years war, were aggravated in the American war; and that, in the late contest, the evil has advanced with strides still more gigantic. Now, this is by no means consistent with the detail, as may be seen from the comparative table above drawn up. Several very important effects of the war establishment upon the finances of the country, are proved, by that table, to have increased in a much smaller proportion during the late war, compared with the American, than during the American compared with the Seven-years war. The average expence of the military and naval departments, for instance, was twice as much in the American as in the Seven-years war. The same expence was increased by considerably less than one half in the late war, compared with the American. Had the proportion been continued, that is, had the expence of the late war borne to the expence of the American war, the same proportion which the expence of the American bore to that of the Seven-years war, the military and naval establishment would have been as 4.000 instead of 2.944 (Table, col. V. The same remark may be made upon the greatest annual expenditure, and upon the excess of the actual above the estimated expenses of the war. In the still more important article of the fictitious capital added to the debt by those wars, the late war appears also to fall short of the proportion. The difference between the money received and the stock created, was above three times greater in the American

rican than in the Seven-years war. This difference was, in the last war, much less than three times its amount in the American war. (See Table, col. II. IV. & VII.) A great number of material considerations have, therefore, been altogether omitted by Mr Morgan on one side of the account, while he is endeavouring to strike a balance.

But we may observe, in the *next* place, that such comparisons are extremely unfair, if made without a much fuller consideration of circumstances. The successive wars in which a state engages at short intervals of time, are far from being unconnected with each other in a financial point of view. They are not insulated events, which may be compared without any allowance for their reciprocal influence. The credit of the country, in every contest, is necessarily affected by the event of the several previous contests which have in former years brought it into difficulties. If fifty millions were added to the public debt in the Seven-years war, much more than the same sum must have been added to the debt in the American war, in order to raise as much money as was formerly procured for fifty millions. And, in like manner, the amount of the debt in consequence of the two previous wars, necessarily rendered its increase more rapid during the late war than it would have been, if no former burdens of this nature had existed.

But, in the *third* place, we have a general and peremptory objection to the whole method of argument used by Mr Morgan in this performance. His object is to prove, not that our expences have been increased, but that our Government has been extravagant. Now, we do not conceive it possible to estimate the extravagance of Government during any war, by merely summing up the money disbursed, and the debt contracted. This is only one side of the account; and to infer, from the result of the calculation, any positive charge of profusion against those who superintended the disbursement, is to be guilty of the same error that a merchant would commit, were he to boast of his profits, or complain of his losses, without striking a balance in his books. Mr Morgan, in fact, endeavours to solve the question, without attending to the necessary *data*; and the whole result of his calculation must, of consequence, be indeterminate. There are only two ways in which a war can be demonstrated to be extravagantly carried on. Either we may deny its necessity and utility, which are indeed one and the same thing; or maintain that the same object might have been obtained at a smaller expence. Mr Morgan expressly disclaims all political discussions that are not necessarily involved in his examination of our finances: but we conceive that the political question of the origin of the war, on the one hand, and the

the peculiar method of conducting its expenditure, on the other, are necessarily involved in the inquiry which he has undertaken to conduct. In his former works, he seemed to be aware of this consideration; for he there attempted to show, that the loans might have been negotiated on terms more advantageous to the public. In the present essay, he never once points at any such comparison; and, without a proof of this nature, or a demonstration that the war ought not to have been waged, or, if waged, that it could have been carried on with smaller military and naval establishments, or a statement of the savings which might have been made in the disposal of the revenue, all his calculations of the absolute amount of loans, expenditure and taxes, present us only with a view of one side of the account—one part of the *data*, from which no conclusion whatever can be drawn as to the profusion or économy of the Government.

Such being our general objection to the political logic of Mr Morgan in this pamphlet, we are the less anxious about the particular arguments which he has taken occasion to intermix with his calculations. The melancholy prospect which he holds out of the diminution that the revenue appropriated to defray the expences of the debt must experience after a peace, has been contradicted by the immense increase of that revenue during the last two years. The idea of the unlimited issue of bank paper allowing every needy speculator to bid for loans in safety, is too obviously inconsistent with the facts respecting the bank business, to require any detailed refutation. The notion, that the unfavourable course of exchange which led to the suspension of cash payments at the bank was produced by the exportation of bullion to subsidize foreign princes, can scarcely be deemed any thing less than thoughtless and violent party declamation, in one who is so well acquainted with the vast commercial resources of this island, who states the whole amount of the foreign subsidies at little more than the comparatively paltry sum of five millions, and who ought to be acquainted with the plainest principles of this branch of political economy. In fact, notwithstanding our author's apparent predilection for arguments strictly arithmetical, and his careful disavowal of any desire to enter upon political topics, we cannot help suspecting that he has adopted this mode of reasoning from figures, as the most plausible and specious plan of attacking the financial operations of the late ministry, and has avoided the discussion of more general subjects, only because the result of such a discussion must have essentially affected the application of his political arithmetic to the question at issue. In spite of the purely arithmetical guise in which he attempts to veil his speculations, and the unquestionable skill with which he conducts all his numer-

ical operations, we have no hesitation in pronouncing the performance to be completely factious in its whole design and execution, and eminently inconclusive in its principles of reasoning.

ART. VI. *Travels from Hamburg, through Westphalia, Holland, and the Netherlands, to Paris.* By Thomas Holcroft. Two vol. 4to. with folio plates. pp. 950. London, Philips, 1804.

FROM the pen of Mr Holcroft we expected at least something amusing; but the greater part of this work does not rise above the denomination of light reading; and light reading, when it is dilated into two capacious quartos, is apt to become as burdensome to the intellect as matter more substantial.

These travels are evidently composed in imitation of the Sentimental Journey of Sterne; and the model has been copied with such scrupulous exactness of imitation, that none of its faults are omitted. The offensive familiarity, the affected oddity and abruptness, the frequent interjections, the apostrophes to imaginary persons, the egotism and levity that distinguish the style of Sterne, are at least as remarkable in his imitator, as his wit, pathos, or originality. Such a manner of writing could only please, we should imagine, in the hands of the original inventor; and though it might help to set off a series of appropriate fictions, was evidently unsuitable for a distinct and continued narrative of real occurrences. Such is the style, however, which Mr Holcroft has thought proper to adopt as the vehicle of all that profound observation, authentic anecdote, and philosophical description, by which he flatters himself that he has paved the way to 'the formation of an universal and permanent code of ethics.' Of the common offences of such imitators, vulgarity, pertness, and trifling or absolute silliness, Mr Holcroft has certainly his full share to answer for: It would be unjust, however, not to add, that he is occasionally lively, ingenious and amusing; that he is generally good-natured and tolerant; and that there is an air of authenticity in most of his narratives, that recommends them to the belief of the reader, in spite of the affectation of the language in which they are delivered.

The professed object of Mr Holcroft's book is to delineate the manners of the people among whom he travels; and, by fixing the facts and the philosophy of national character in the most important part of Europe, to enlarge the sphere, and increase the accuracy of our moral observations. He contrives, however, not to be very much constrained by the exclusive nature of his object; for whenever he finds himself disposed to describe a building, a picture,

picture, or a dinner, he immediately discovers that the manners and character of a people cannot possibly be better elucidated than by an inquiry into their taste in architecture and the other arts of refined life. In devoting himself to the delineation of national manners, Mr Holcroft was probably determined, not merely by the great interest and attraction of the subject, but, in some degree, by a consciousness of the limits of his own qualifications. To the naturalist—the man of science—the agriculturist—the merchant, or even the admirer of the picturesque, he does not pretend to be capable of affording either information or delight.

This book is entitled, *Travels through Holland, Westphalia, &c. to Paris*; but the reader will be grievously disappointed, if he expects to be amused with a moving picture, or a succession of new scenes and adventures through the whole of the performance. About one third of the first volume conducts Mr Holcroft and his family from Hamburg to Paris; and the remaining 800 quarto pages are entirely occupied with the description of that city, and with a full and particular account of every thing the author saw, heard, did, read, felt, thought or imagined, during the eighteen months that he remained among its inhabitants.

Mr Holcroft begins his work with some good plain observations upon the pain of parting with friends, and gives us a sober, dull narrative of the manner in which he was cheated by his landlady at Hamburg;—but he does not grovel long in this vulgar track; in the third page he flies off in this dramatic exclamation.

‘How forgetful I am! Or rather how much I have to remember! Do, my good and dear Doctor, accompany these ladies, to whom you have always been so friendly, as far as the boat. I must run to the banker, and the bookseller, and above all to the man who has so disinterestedly and essentially served me, the friend whom I shall not easily forget, Mr Schuchmacher; with whom I have still some business to arrange.

‘When did M***** refuse a kind office?’ p. 3.

He gets over all his engagements, however, and arrives at the boat-house soon enough, as he elegantly expresses it, ‘to take a parting glass’ with his friends.

The next chapter sets off with this splendid specimen of the *onomatopoeia*—which is meant, it seems, to represent the action of smoking a pipe.

‘Pff! pff! Hu, hu, hu! I am stifled!—Will you be kind enough, Sir, to let this lady sit on the other side of you? *Ja wohl, mein Herr; aber—*“Willingly, Sir: but—”

‘This *but* was very significant. Every man had his pipe; and it was in vain to change places. We had lived two years among these eternal smokers.’ p. 5.

In the end of the same chapter we have a very fair specimen of the self-complacency with which Mr Holcroft pursues his lubrications, of the ease of his style, and the fineness of his feelings.

'These marsh lands are uncommonly prolific; and their inhabitants are a very good kind of people. So be it, I bless my stars, I am but a passenger.'

'I had supposed Harburg to be a village: and the imagination had some relief, as I approached, to discover it was a fortified town.'

'It had just been taken possession of by the Prussians; and this was another subject for meditation. It affected me. It brought to remembrance the contests of power, the sufferings of the unoffending, and the whole train of melancholy reflections by which the mind, dispirited, fatigued, and worn, had been sunk to apathy or despair. What do these men do here?' said I. 'Why do they not stay at home; and build bridges, repair roads, drain bogs, and fructify the barren sands of Brandenburg?' 'Would not this be to gain territory?' 'Cannot ambition occupy itself more profitably and more nobly than in rapine?' 'Ambition a noble quality?' 'Oh, no!' 'It is blind, selfish, stupid, and almost as ignorant as it is hateful.' p. 6, 7.

Of the country, Mr Holcroft assures us that 'nothing could be seen except cold and green nakedness;—the inns, too, were very bad, and the *stuhl-wagen* jolted abominably. At Bremen he meets with a German *petit-maitre*, who is not ill described; and at Delmanhorst the sight of some Prussian soldiers reminds him that the great Frederic was 'great for dealing in human slaughter.' At Groningen, where some of the natives were rude enough to laugh at the outlandish appearance of his party, Mr Holcroft takes occasion to make the following profound and interesting observations.

'These are trifles; and in fact we laughed in turn. I suppose it was virtue in us, that we concealed our laughter from the objects of it though I leave it to better casuists to decide how far this kind of laughter, or, if they are in the humour to dispute, any kind of laughter, is a mark of sound sense. I own, I wish I could laugh oftener yet I am very wrong, if I wish for folly; and I do not very well know how pure wisdom should excite laughter. Bless us! we have many doubts to solve; and, as I fear, much rubbish to remove.'

'Are we in the land of metaphysics; or of moral philosophy; or where? We ought to be at Groningen; ~~uber~~ Groningen: where the people appear to have a deal of common sense. Be it remarked, however, that here, in sober Groningen, we met with the first tree of liberty.'

'What warring sensations did the sight of it inspire! What is a revolution? And what has this revolution effected? The mass of evil, and the mass of good, put in opposite scales, which shall preponderate? I solemnly declare, in the face of mankind, my heart aches, oppressed

pressed with a sense of past miseries, though I ardently hope, nay, am seriously convinced,) &c. p. 42.

Mr Holcroft however does not always trifle or rave so absurdly. His description of a Dutchman, though not original, is correct and amusing.

'The Dutchman, living in continual danger of inundation, and of losing, not only the fruits of his industry, but his life, becomes habitually provident. His foresight is admirable, his perseverance not to be conquered, and his labours, unless seen, not to be believed.

'They astonish the more, when the phlegm of his temper and the slowness of his habits are considered. View the minuteness of his economy, the solicitude of his precaution, and the inflexibility of his methodical prudence! Who would not pronounce him incapable of great enterprize? He builds himself a dwelling: it is a hut in size; it is a palace in neatness. It is necessarily situated among damps, upon a flat, and perhaps behind the bank of a sluggish canal: yet he writes upon it, *My Goenege*, "My Delight;"—*Landlust*, "Country pleasures;"—*Landsigt*, "Country prospect;"—or some inscription that might characterise the vale of Tempe, or the garden of Eden. He cuts his trees into fantastical forms, hangs his awning round with small bells, and decorates his Sunday jacket with dozens of little buttons. Too provident to waste his sweets, he cunningly puts a bit of sugarcandy in his mouth, and drinks his tea as it melts; one morsel serves, let him drink as long as he pleases. Around him is every token of care, caution, and cleanliness; but none, in his domestic habits, of magnificence, or grandeur of design.

'Having well considered him in these his private propensities, the eye turns with amazement on his public works. The country, which nature appears to have doomed to stagnant waters and everlasting agues, his daring and laborious arm has undertaken to drain, has overspread with verdure, and has covered with habitations. The very element, which seemed to bid him utter defiance, he has subdued and rendered his most useful slave,' &c. Vol. I. p. 37, 38.

To this may be added, the following account of the general appearance of the lower orders at a Dutch fair:

'The chief thing which affects the eye of a foreigner, as something unusual, is the general costume; the dresses, physiognomies, and peculiar appearance of the lower classes, decked in their holiday finery. Broad pewter and silver buckles; large and small buttons, both in excess, and both of ancient usage; some with short vests, and others with coats down to their heels, each of them sitting close, and showing the waist; projecting hips, the men wearing eight or ten pair of breeches, the women at least as many petticoats; stockings of various colours, not excepting purple, red, and yellow; peasant girls in short jackets, with their gold ornaments and rich Brussels lace; tobacco pipes, various in their form and size; and countenances with a frequent tinge of the

livid. These are a few of the many marks which catch the stranger's eye, and characterise the people.' Vol. I. p. 91, 92.

It is not long, however, before Mr Holcroft returns to his favourite style of consequential trifling; and, among other things, is obliging enough to communicate the process of thought, by which he was enabled to discover how there were no water-mills in a country where there was no running water. This is done with great solemnity, as follows:

'An observation had forced itself upon me, soon after I entered the United Provinces. The country abounds in water, and the Dutch neglect no opportunity of profiting by the gifts of nature: yet I do not recollect to have seen a single water-mill. The reason was before us. There were innumerable canals, but no streams: it was almost a level surface.' Vol. I. p. 77.

As an instance of great humour and originality, we then find the pleasure of meeting with an intelligent man, who speaks your language abroad, compared 'to the green mould of Cheshire cheese'; and afterwards, upon mentioning the fatigue which his wife suffered from the rough shaking of the diligence, an imaginary personage is brought in to say—

'But how could you be so cruel to your wife as not to travel in your own carriage, so built as that she might repose at her ease?

'Ay, dear Madam, how indeed! And how could you and others, who may question me, be so cruel as not to provide her with such a carriage? Though I perfectly know the disgrace annexed to it, I will whisper a secret to you, trusting to your generosity not to make it public. The man, to whom Fortunatus left his purse, was not a poet. Do not imagine, dear Madam, that I complain. Oh no!' &c. Vol. I. p. 117.

A little farther on, we are told—

Cars drawn by dogs is a common practice here. It is highly condemned by some writers in Paris, where likewise the practice is not unknown; and I do not think the powers of the animal are well calculated for this labour. Is it not very wrong to pervert the animal powers?" Vol. I. p. 127.

If Mr Holcroft had not written his novels with a little more spirit and meaning, we can scarcely imagine that they would have been in such request even at the circulating libraries. In entering France, he endeavours to compare the impressions which the general appearance of the country makes upon him, with those which he received when he first visited it in 1793. The following remarks are rather interesting.

'In passing through France formerly, the variegated colours of the land in cultivation always caught the eye of an Englishman, as a singularity. In perspective, they looked like long stripes of ribband; in different shades of yellow, brown and green. The reason of this was, that

that different peasants had each his long slip of land to cultivate, and that each grew the species of plant or grain which suited his purpose, or pleased him best. We remarked these appearances still, but I think much less frequently.

'The wretched raud huts, of which I had formerly seen such numbers, many of them still remain: I believe, but dare not affirm, they are diminished.

'Two things to the advantage of the present moment I can speak of, without any doubt or fear of misleading: the peasants are now better clothed, in general, than they were; and their looks I will not say are more merry, but rather more sedate, yet more truly cheerful. There still are many beggars among them; but the numbers now are not so great. If the large and spreading picture of poverty, I may say of wretchedness, be not exceedingly lessened, I am exceedingly deceived. The last day of our journey was Sunday; and we saw too many of the people, both old and young, cleanly in their dress, and with satisfaction in their faces, for these signs of ease and better days to be mistaken. The rags, the poverty, the harassed looks, the livid tints, the pictures of misery, I had formerly seen, cannot be forgotten.' Vol. I. p. 134, 135.

All traces of sober inquiry, or rational speculation, however, are dispelled as soon as he comes within sight of Paris; and he breaks forth into this edifying soliloquy:

'Permit me to pause. Recollection is a duty. Why am I here? The question confounds. I have parental ties that call on me, and family affections to indulge: but the grand purpose of my journey is to examine and endeavour to understand a nation, by which, during twelve years, the world has been held in astonishment. And who am I, that I should undertake this labour? It is no trick, no oratorical flourish: no; by the honesty of my soul, I shrink and tremble at my own temerity! Paris, the city which sat in judgment on ages past, while the present, involved in the decree, waited in dread to hear! Paris, whose mandates to-day were the emanations of divinity; to-morrow, the rules and ordinances of the damned! Paris, whose intrigues nothing less than omniscience could comprehend, nothing less than omnipotence could disentangle! Paris, whose frivolities Folly herself despises, while Wisdom stands enraptured at her science! Pretend to give the world a picture of Paris?—Let me recover!' Vol. I. p. 139, 140.

The *entrée* itself, which was made at midnight, is described in a very pompous manner, but not without some force of colouring.

'The streets reverberated; the reflecting lamps cast the broad shades of the massy stone buildings; they were so lofty that they concealed the skies; and we seemed to be winding through intricate and endless caverns. These are not fanciful pictures, but real impressions, such as the place is calculated to give. *La rue Bouloi* is in the centre of Paris; and to that we were driven.' Vol. I. p. 143.

Among

Among other *bizarre* reflections that suggest themselves at the view of those barriers by which the proscribed were formerly shut in for destruction, Mr Holcroft, to prove his orthodoxy, observes, 'Would they had been the walls of Jericho, and that the horns of rams had been sounded before them !' There is then a long account of his negotiation about lodgings ; and in the 160th page he finally takes a position, and begins his grand work of observation.

Of the remainder of this work, we find it extremely difficult to give any distinct account. It is made up of such a multitude of unconnected trifles, and exhibits such a collection of superficial and minute observations, that it is utterly impossible to give any intelligible abstract, and extremely difficult to find any grounds for selection. Coffee-houses, quack-doctors, sign-posts, hand-bills, illuminations, festivals, public places, courtezans, education, adultery, actors, artists, &c. &c. are all treated of by Mr Holcroft in the most copious, disorderly, and desultory manner imaginable. The description of what he sees, bears but an inconsiderable proportion to the exposition of what he thinks ; and the necessity of making a large book, has distended the account of what he reads, to a bulk still greater than either. In going over this miscellaneous assortment, we shall no longer pretend to follow the arrangement of the author, or to present our readers with any thing like a complete account of the innumerable objects he has introduced to their notice. As a specimen of the kind of entertainment that may be expected from this great work, however, we shall endeavour to give a view of those parts of it that appeared to us most extraordinary and amusing.

As we cannot persuade ourselves, with Mr Holcroft, that the most instructive traits of national character are to be found among the hawkers, the jugglers, and ballad-singers of a great city, we rather chuse to extract the following general observations on the present costume of the nation.

'The revolutionary spirit has not been limited to political and civil institutions ; it has pervaded every department of life. Monks and abbés, with muffs, silk coats, arm hats, and all the assimilating costume, have disappeared. The well-dressed men are either military, or habited so like the English as to seem almost the same people. They are chiefly to be distinguished from us by difference of deportment, difference of physiognomy, and by an overgrown bush of hair on each cheek.

'But the well-dressed men are very few : the revolution has far from entirely corrected the propensity of the lower orders to slovenliness. Long pantaloons, once put on and never changed till they are entirely worn out, linen not fit to be seen and therefore concealed, a great coat dangling to the calf of the leg, buttoned up and worn also while it will

last,

last, a rusty round hat, uncombed hair, fierce whiskers, a dirty chin, and a handkerchief tied not under but over it and not of muslin or silk but of coarse-coloured linen rarely washed; such is the figure not perhaps of the majority, but certainly of great numbers of the men to be met of an evening, even in coffee-houses; such are hundreds of the figures that crowd together at all hours of the day, and walk the Palais Royal, fill the billiard rooms, and exhibit themselves in all public places where the entrance is free. At some even of the dancing gardens on the *Boulevards*, they find it necessary to write over the door—'Admittance to persons decently dressed.'

The French character is enterprising, forward, impelled by curiosity, not easily repulsed, and with little of that shyness which in the English is sometimes pride, and sometimes a foolish feeling of shame, but often likewise a decent sense of propriety. It appears as if a Frenchman imagines he has only to show himself to be admired. If he publicly write, speak, or act, he assumes importance. If his portrait be painted, his head must be thrown back, his breast forward, and his air must either be smiling, dignified, or disdainful: in his own language it must *impose*. p. 169, 170.

The reader may also take the following picture of the *Boulevards*.

'Stalls of dirty books; tressels with toys; sellers of cakes and canes; fan-menders, bead-stringers, beggars, quacks, tumblers, and show-booths; fellows displaying tricks of legerdemain; venders of miraculous dyes and powders, who dip bits of white ribbon in a liquor that turns them pink; orators parotting over twopenny systems of geology, and the order of the universe; teachers of secrets that will enable the buyer to cut glass under water, etch landscapes upon egg-shells, engrave portraits by pricking paper with pins and dusting it with lamp-black: these, intermingled with the display of milliners, linen-drappers, print-sellers, and a variety of trades, continued through an avenue two miles in length, spacious, enlivened as I have said with carriages, and adorned by lofty trees, gardens, and hotels, with the gates, or rather the triumphal arches of St Denis and St Martin, the structure that was the Opera House; these, I say, and thousands of other objects which no memory can retain, if the reader can arrange and put them together, will form a something that he may imagine to be the *Boulevards* of Paris.'

After four or five chapters of similar, but more detailed description, Mr Holcroft comes to give an account of the *national festivals* which he had occasion to witness during his stay in Paris. Upon this subject, our readers will perhaps be surprised to hear that he has bestowed upwards of 120 pages, although the *spectacle* and preparations were very nearly the same in every one of them. Concerts, illuminations, temples of painted boards, firing of artillery, dancing and displays of agility, formed the grand ingredients of all those exhibitions; but though Mr Holcroft goes over all this detail with as much fatiguing exactness as could be found

in a herald's account of a coronation, it would still have been impossible for him to have filled one third part of the space we have mentioned, had it not been for two notable devices. The one is, by taking a retrospective view of all the festivals, processions, and public rejoicings which history represents as having taken place since the foundation of the royalty within the precincts of Paris. By the assistance of Saint Foix and Dulaure, he accordingly goes back to the time of Charles VI. and Louis XI., and entertains his readers with a long and particular account of the mysteries and pantomimes, and the saints and heathen deities that were conjured up for the delight of the Sovereigns and people of those days. He then comes to the tournaments and emblematic pageantries of a succeeding age; and passing leisurely through the classical affectations of Louis XIV., terminates his historical review with a minute description of the great festival of the Federation, which was celebrated in the Champ de Mars on the 14th July 1790. Having thus arrived at the modern period of the history of French festivals, when books can no longer be found to transcribe, Mr Holcroft has recourse to his *second* contrivance for prolonging his own descriptions, and the gratification of his readers. This consists in transcribing at full length the various addresses, decrees or enactments by which the solemnity was appointed, and also fairly copying over the program or advertisement in which the particulars of it are always announced to the public. With this advertisement in his hand, Mr Holcroft then proceeds to survey the actual appearance of the exhibition; and is mischievously particular in pointing out where the execution was defective, and in what particulars the preparations were incomplete. Few things, we acknowledge, have been more fatiguing to us than this process of verification: nor are we to this hour altogether satisfied that the national character is completely elucidated by stating that the Temple of Concord, which ought to have been open in the morning, was not ready till the afternoon, or that the national column was erected of rafters covered over with painted paper. In a humour if possible still more childishly sentimental, Mr Holcroft then exclaims against the abominable brutality of making discharges of artillery a part of any joyful solemnity, and laments that 'the peaceable world should be thus wantonly reminded of carnage, destruction and horror, by the command of its governors.' A little after, we have a coarser sentence about the 'ox and frog monument of that chief of the Hobadils, Louis XIV.'

After Mr Holcroft is happily delivered of his dissertation on festivals, he presents us with a number of loose remarks upon national prejudices, which are less novel than just, and more remarkable for their liberality than their acuteness. He then strings together

together a number of common-place anecdotes, and stories of Gascons, waiting-women and professors. We do not think any of them worth repeating. After some bewildering discourses on the nature and causes of a Frenchman's partiality to Paris, we are surprised to find ourselves engaged all at once in an abstract dissertation on the ambiguity of language. This issues at last in some common-place lamentations over the unsettled notions of *honour* that prevail in the world; and so totally does Mr Holcroft forget that he is writing travels in France, or at least a description of Paris, that he favours his English readers with a *diatribe* on the horrors of boxing, and coolly copies out for them the account given in the Morning Chronicle of the famous match between Belcher and Fitzby in April 1803. From this he makes an easy transition to the subject of duelling, the antiquities of which he details with great precision, and digresses into the kindred topic of ordeals by fire and water; upon all which he is as learned and satisfactory as if his subject had compelled him to treat of them upon a very short warning.

These disquisitions carry us a little way into the second volume, when we meet somewhat abruptly with this pathetic exclamation—

‘Honesty and precision of language, oh! when shall your benign influence purify the heart, make it blush at its cowardly GLOSSARIES, bid it shrink from dissimulation, and, while it detects the practice, accustom it to abhor the consequences of hypocrisy!’ Vol. II. p. 26.

This pious ejaculation turns out to be the prelude to a long historical account of the gallantry and habitual adultery of the French, in which is engrossed an abridged history of all the royal mistresses from the days of Philip the Long and Charles VII. down to those of Louis XV. This edifying legend occupies nearly forty pages, and twenty more are filled with extracts and translations from interludes, epigrams, and satires, illustrating the unaltered corruption of modern manners. Upon this important subject, we cannot help regretting, that Mr Holcroft has not been able to come to a clearer conclusion. This is the oracular sentence with which he dismisses it—

‘Though I dare not affirm, I hope and *believe* the number of wives faithful to their husbands is the greatest: yet what I have so frequently observed makes it with me *exceedingly doubtful*.’ Vol. II. p. 61.

He adds in another place—

‘I can testify that French women, as well young as old, will, without scruple, and it may by miracle be without meaning, bestow their kisses unasked, and describe charming gardens and retired groves, in which they will invite you to walk, proposing themselves to be your guide.’ Vol. II. p. 84.

Upon the subject of decency and cleanliness, Mr Holcroft philosophizes

iosophizes and exemplifies, in a manner that is in the highest degree nauseous and disgusting, though we really believe that he does not intend to give any offence. This inquiry ends in a discourse upon dress; for the full elucidation of which, all the fashions from the time of Francis I. are made to pass in review; and upon the alternations of fashion between London and Paris, he is pleased to observe, that 'it cannot be denied that these things are indications of that highest of all high considerations, the state of mind and of morals.' A little after, he says, with still more solemnity, but at the same time with all the laudable caution that was natural in venturing upon so alarming a remark,

'There is an aptitude in the mind to systematize on its own conjectures: Of this, I wish the reader to be aware, when I say I am mistaken if female decency, nay, if chastity and morals, be not injured by the *disuse of hats* which has so long prevailed in France.' Vol. II. p. 117.

We pass over the author's treatises on courtezans and on nurses, in the latter of which he maintains that many an old woman has more power than Bonaparte. On the new plan of education, by central and departmental schools, he only observes, that the First Consul has engrossed to himself the whole patronage and regulation of these institutions; and that, in the polytechnic school at Paris, in particular, it is an understood thing, that if the father or relation of any student express disapprobation of the government, the boy is immediately expelled. During the war with Toussaint, all the youths of colour were dismissed with ignominy.

Mr Holcroft admits that the French have some pretensions to politeness, though their merit in this way, he says, lies chiefly in that *forbearance* by which quarrels and outrages are generally avoided. Many of the observances to which they ascribe so much importance, he justly considers as mere local and arbitrary usages; and, in some points, he endeavours to show that their manners are absolutely rude. In proof of this, he alludes to the *quizzing* which his spectacles and spencer drew upon him from the populace, and to the ingratitude of diverse individuals to whom he lent books at the opera, and showed other civilities. The charge, however, we will confess, becomes more serious, when he adds, that he repeatedly saw women of the town *kicked* in the *Palais Royal* by the waiters; and that in one of the theatres, an old gentleman actually struck a lady with his fist, in consequence of some dispute about a place. The pit, he adds, is always extremely turbulent at Paris, and absolutely rages as often as a lady lays her cloak or handkerchief over a box, or turns her back upon the audience.

Mr.

Mr Holcroft next calls in question that gaiety of heart on which the French are so apt to value themselves. His first reasons for doubting its reality, did not indeed appear to us to be very substantial—the height of their houses, for instance, and the darkness of their court-yards and *portes cochères*, or the heavy form and dusky colour of their furniture. The frequency of suicide, however, is an argument rather more convincing. In the *Morgue*, a place in Paris where dead bodies are deposited till they be reclaimed, upwards of 130 are supposed to be annually exposed; but as the fashionable mode of death is by drowning, the victims must be much more numerous. Mr Holcroft was informed from a very respectable quarter, that there had been 193 suicides in the metropolis within the last ten months, and about as many in the departments. Beggars are more numerous in Paris than in London, but, in general, not so importunate. Credulity and superstition still retain a good deal of influence over the lower orders, though Mr Holcroft thinks that the hierarchy will never be able to renew either its tyranny or its impostures.

The association of ideas by which Mr Holcroft is guided in the distribution of his subjects, is rather more capricious than most authors would choose to follow in a serious composition. In speaking of credulity, he happens to glance incidentally at the general behaviour of the Parisians in places of worship; and this leads him to give some account of the festival observed on the birth-day of Bonaparte, *because* the greater part of it was solemnised in churches: and then the mention of this festival naturally leads him to say something of the character of the First Consul himself. This, however, is a subject which cannot fail to attract curiosity in whatever way it may be introduced; and Mr Holcroft has contributed his quota of anecdotes and reflections with great goodwill and liberality. The great interest of these speculations, however, is now over: among those who live beyond the sphere of his power, there is no longer any dispute about the character of this fortunate usurper. Mr Holcroft, with all his admiration for energies and sublime capabilities, is obliged to admit the selfish littleness and violence of his temper, and to allow that he is merely acting over the vulgar part of an ambitious tyrant, with all its common accompaniments of rant and atrocity. There is something of a poetical rapture in the style which he assumes upon this occasion; but it is the best written part, we think, of his performance.

Of republicans he was the first, the most magnanimous, and the least to be suspected: the love of freedom, the emancipation of slaves, and the utter expulsion of bigotry, were the pictures he delighted to exhibit to the admiring world. Cesar, nay, Alexander himself, who professed

fessed to conquer only to civilise, appeared to be outdone by a stripling; a scholar from the military school; concerning whom his playmates began now to suspect memory, that they might discover in what he had differed from themselves.' Vol. II. p. 272.

The world, in general, only changed their opinion by degrees, but Mr Holcroft detected the hypocrites in one decisive act.

'The unhappy period at length approached, that was to show him a character of vice and virtue so dangerously combined, as to alarm penetration, and warn the world to beware. He landed in Egypt; and, by a stroke of his pen, he and his whole army became Mussulmen.

'Every doubt was then removed: he was a man to whom, could he but gain the end in view, all means were good.' Vol. II. p. 273.

The same propensity to account for every thing by the supposition of some single and palpable cause, induces Mr Holcroft to assure us, that the tyranny of Bonaparte arises almost exclusively from his having been accustomed to command armies before he ascended the seat of civil dominion. The following observations, however, are entitled to attention.

'Accustomed to gain the grandest advantages by secrecy of plan, celerity of action, and those stratagems that best can mask and mislead, the same habits remain, and the same means are adopted, when the conqueror seizes on the rule of states, as when he sends forth his cohorts to the plunder of cities, and the capture of provinces. He alone must project; he alone must command; reward and punishment must be at his sole disposal: no community, no single creature must act but as he wills. That to make his will known is impossible; that it varies in himself from day to day; that men cannot resign their intellect, cannot resist the impulses of habits and the decisions of the judgment; and that the task of regulating the actions of millions by the will of an individual is the most extravagant and absurd of attempts—are truths of which he has no knowledge, or has lost all recollection.' Vol. II. p. 277.

The barefaced violence by which all the journals were silenced, but those which became the organs of the government, has been long known over all Europe. Mr Holcroft adds a number of well authenticated facts of the same nature, and mentions the names of several unfortunate authors who were sentenced to banishment or imprisonment for having written what did not meet with the approbation of the First Consul. Even his philosophical associates are now excluded from his presence; and, on some occasions, the contempt with which he treats the adulation which his tyranny has extorted, reminds us of the capricious insults of Tiberias to his degraded senate.

'In the true spirit of French declamation, some one affirmed, speaking to Bonaparte, that England was far behind France in truly understanding the principles of liberty; To which he replied, "It would be

be well for the latter, if it did but enjoy one tenth part of English freedom."

'He will seldom condescend to argue; and, when he does, he considers it as insolence, in any one, who dares to be of a different opinion.' Vol. II. p. 288. 289.

In every society, Mr Holcroft assures us, Moreau is praised, and advantageously contrasted with Bonaparte. 'Their busts,' he adds, 'are exposed to sale on every stall; and before I left Paris, that of Moreau was said to sell much the best.'

'According to good information, the ungovernable anger of Bonaparte is become so excessive, that, when a messenger brings unpleasant news of any kind, but especially if it relate to foreign affairs, the persons in waiting are each afraid of being the reporter. His fits of passion are so violent, that it is said he is now frequently provoked to strike; and that it is very common for his footmen to receive blows.' Vol. II. p. 301.

Mr Holcroft says, that he has every reason to believe that the angry and intemperate attacks upon the English nation, which appeared in the *Moniteurs* during the peace, were written by the First Consul himself.

'From an engineer, who was with him in Egypt, I learned that it was his custom, when he had summoned a council of war, to listen to the opinions of others, to give no opinion himself, to act in a manner that could be least expected, and to do this with such determination and celerity, that, said the narrator, it was like a torrent. So great was his ascendancy, that, when he was present, the generals acting under him appeared like so many schoolboys.' Vol. II. p. 303.

In executing these plans, it is notorious that he is utterly indifferent to the waste of life that may be occasioned; he has no sympathy with the sufferings of his followers.

'During the extreme summer heats in Italy, it happened that the enemy was certain on such a day that his army was at such a distance. It was well known that forced marches were with him common occurrences: but the season would not admit of them, without an absolute and certain loss of men; which must be excessive in proportion as their speed should be great.

'Bonaparte was not to be retarded by such motives. On this very occasion, he issued his orders as he lay in the warm bath, of which he makes frequent use, and the men were driven forward, the foot by the horse, with such violence that thousands perished on the march. Some remonstrances were attempted by the officers, but they were repulsed with contempt and threats. The horse and advanced troops secured various passes, the supposed impossibility was overcome, the enemy attacked, and the end of the conqueror obtained. A whole district fell the common prey; and the living, in the triumph of victory and the revel of plunder, thought no more of the dead.

'The contributions he laid were without mercy; and his treatment

of the magistrates of the conquered, when they ventured to make any strong appeal against cruelty or injustice, was such as men would scarcely bestow on a dog.' Vol. II. p. 307, 308.

We shall conclude these extracts with the following physiognomical sketch.

'Sallow complexion, length of face, a pointed nose, a projecting chin, and prominent cheek-bones, have distinguished the countenances of fanatics and persecutors. Fanatics and persecutors were often men of powerful minds, but violent passions; and between such men and Bonaparte, allowing for times and circumstances, in physiognomy, in talents, and in manner of acting, there is great resemblance.' Vol. II. p. 320.

We cannot go through the remainder of this work. It consists principally of a *catalogue raisonnée* of all the public performers of any eminence, and of the men of letters and authors whose names are in circulation in Paris. It also comprehends a rapturous account of the national museum, of which the following sentence may serve as a specimen.

'The harmonious *Guido*; *Barbieri*, *Corregio*, *Titian*, *Da Vinci*, and *Raphael*! Giants, that exterminate their imitators: each a Saturn, devouring his children.

'Why do I indulge in a style that resembles rhapsody? It is that I am vainly struggling to perform a task to which I am unequal. It is, that multitude and volume palsy all effort to individualize, and give me the right to say, go, and behold, that thy eyes may bear testimony to the truth.' Vol. II. p. 439.

After a short *résumé* of his observations on coffee-houses, gaming-houses, and prisons, Mr Holcroft leaves Paris, and returns to England by the way of Calais, without meeting with any adventure.

Upon the whole, we think that this book is a great deal too long, and that it has attained this magnitude by the most intrepid and extensive application of the approved recipes for book-making that has yet come under our consideration. If every thing were deducted that has no relation to the present state of the countries which the author proposes to describe, and every thing which is transcribed from books that might as well have been consulted at home, the publication, we are persuaded, would be reduced to one third of its present bulk. The lofty pretensions, too, with which the author sets out, and the solemnity with which he continually speaks of his labours, form a ridiculous contrast with the insignificance of the matters upon which he has rested his attention. Instead of dwelling only upon those things which possessed in themselves some degree of interest or attraction, he has attempted to transport his readers into Paris, by setting before their eyes every thing which his own could discover

cover in that situation ; and has thought there was no way so sure of omitting nothing characteristic or important, as by setting down every thing that occurred, and thinking nothing too trifling to be omitted. In this way, he has undoubtedly brought forward some groupes in a lively and animated manner ; but he has taken all dignity, unity, and distinctness from his performance, considered as a whole ; and has crowded and confused its inferior compartments in such a manner as scarcely to leave any other impression on the eye of the observer, but that of disorder and fatigue.

Of the style and language of this book, a tolerable judgment may be formed from the extracts we have already given. Its ruling vice is affectation, which is frequently combined with a greater degree of grammatical inaccuracy than is usual, even in works of this description. In the preface, the author informs us, that ‘ his principal subject is the city of Paris, its inhabitants, and the marks by which *they* are distinguished from other cities and other nations.’ A few pages afterwards, he chuses to say, ‘ In their common discourse much, and in their daily actions more, the opinions of a people are broadly written.’ He talks also of ‘ murders and atrocities, *such as the very image of makes* the soul revolt ;’ and of ‘ four children, *none of whom not* having a parent’s care,’ &c. He informs us, moreover, that ‘ *cars* drawn by dogs is a practice,’ &c. ; and that a man with a dirty silk coat was ‘ surveyed *with continued repetition* by his companions.’

This book is very handsomely printed, and the plates have the dimensions at least of magnificence : the greater part of them, however, are very indifferently executed ; and the two general views of Paris are in every respect abominable. The vignettes are by far the best, and many of them are both designed and finished with great taste and elegance.

ART. VII. *Memoires du Comte Joseph de Puissaye, Lieutenant General, &c. &c. qui pourront servir à l'Histoire du Parti Royaliste Francois, durant la derniere Revolution.* 2 vol. London. E. Harding & Dulaw. 1803.

M. PUISSAYE has devoted his retirement in Canada to the vindication of his character from charges which have obtained a very extensive circulation. He informs the Public, that he has composed these volumes under the pressure of an almost uninterrupted state of bad health, and that, from that cause,

he is obliged to offer them to the world in an unfinished state ; and it is so uncertain whether he shall live to complete the task he has begun, that he has made arrangements for the publication of the papers to which he meant to refer, in case of his decease.

In the first of these volumes, he delivers his sentiments on the causes which produced the French Revolution, and the events which followed, down to the dissolution of the first National Assembly. The second volume contains an account of the measures adopted by M. Puissaye to form a Royalist army in Normandy and Brittany, down to September 1794, when he came to England to concert measures with the British Government. In this volume M. Puissaye's personal adventures and conduct occupy the greater part of the narrative ; and many historical anecdotes are related, which have hitherto been little known to the Public.

M. Puissaye's reflections on the causes which produced the French revolution, are delivered with singular temper and moderation. He imputes the whole to the divisions and disunion which prevailed in every order of the state. Our readers are probably well acquainted with many of the abuses which led to the downfall of the aristocracy of France ; but much more than usual is ascribed by our author to the divisions which prevailed between the noblesse of the Court and of the provinces. The courtiers were possessed of all situations of power or emolument, while the provincial nobility were precluded, by the prejudices of their order, from filling many of the most important situations in life. The study of the sciences, the exercise of the liberal arts, and the administration of justice, were almost entirely engrossed by men whom the higher nobility considered as an inferior class. Although they occupied nominal situations, and possessed a fictitious pre-eminence, they had lost every thing which could give them a real preponderance in the event of a struggle. Their degradation was completed by the venality of the Court. Every office, every species of distinction, was bought and sold. Titles were so rapidly multiplied, that every fresh creation made those who had formerly been ennobled impatient for some new promotion. At the same time that the state of the nobility was such as indicated the weakness of the government, the people possessed few privileges which could give them any attachment to the constitution of their country. Some of the provinces indeed had the right of holding meetings of the states according to the capitulations by which they had been united to the crown of France ; and though this *privilege* had been reduced to the right of making remonstrances, which were generally repressed by menaces, or answered

answered by *letters de cachet*, yet M. Puissaye assures us, that even this shadow of liberty was not without effect; and that to it must be attributed the superior degree of energy which these provinces displayed in the combat which they afterwards maintained for their laws and their religion.

‘Their conduct’ he observes (p. 49.) ‘ought to recal to the recollection of those who govern, a truth too often forgotten, that the maintenance of the rights of subjects affords the most solid support to the authority of the sovereign.’

In the other provinces of France, the Parliaments were the only barrier between the unlimited authority of the Prince, and the abject condition of the people. Our author is loud in his praises of the character and conduct of the members of these assemblies; and his sentiments on this subject form a strong contrast to those of M. Mounier. Both the nature of these institutions, and the general conduct and character of the members, meet with his decided approbation; and although he appears to admit that the legislative powers which they assumed, were usurped, he at the same time asserts that they were uniformly executed for the advantage of the nation.

To remove any suspicion that might attach to the very decided approbation which M. Puissaye bestows upon the Parliaments of France, he assures us that he has no motive of professional or family attachment which could bias his judgment.

‘I have heard the Parliaments’ (says M. Puissaye, p. 51.) ‘calumniated by men attached to the Court: That was to be expected; for the Court feared them, and had determined on their destruction. I have since heard them calumniated by the opposite party: That was also to be looked for; that party found it necessary to destroy them. I have seen them act throughout with dignity and courage, suffering at one period for their opposition to the enterprizes of arbitrary power, on another occasion victims of their zeal for the support of lawful authority.’

M. Puissaye observes, that many persons have expressed their surprise, that the ablest ministers France ever produced in the war and marine departments had been *hommes de robe*. Our author remarks that this fact may be easily accounted for.

‘A well informed man, possessed of habits of application, can in a short time make himself fit for any situation; while a man who is ignorant, and who believes that he is possessed of an extensive right to office, from birth, from favour, or from fortune, is incapable of any employment.’

He asserts accordingly, that these men would probably have acquired the same reputation in the command of armies. The

statesmen and generals of the Greek and Roman republics were at the same time their magistrates.

If the members of the French Parliaments were deserving of the eulogium bestowed upon them by our author, they certainly form a striking instance of the powerful influence of moral situation. They must have felt that the place which they were to hold in the public estimation depended upon their own conduct; and, amidst the contempt into which the other institutions of the state had fallen, they could only preserve the powers which they had in some measure usurped, by showing that they possessed those qualities which inspire confidence and command admiration.

Divisions, equally fatal to the repose of the state, subsisted between the dignified clergy who resided at court, and the *curets* who lived among the people and possessed great influence over them. It thus appears from a view of all the institutions upon which the permanence and stability of a government must depend, that the monarchy of France was reduced to such a state of disunion, that it was unable to resist any violent impulse. M. Puissaye enumerates other causes which increased the disorders of the state, and weakened the authority of the Sovereign. The profligacy of the government during the minority of Lewis XV., gave rise to a spirit of irreligion and immorality throughout the country, which the feebleness of his measures tended to confirm. The corruption of manners was completed by the influence of the press, which diffused visionary and immoral publications of every description. It was seldom that any attempt was made to repress them; and such was the weakness of the rulers, that the authors of these publications even courted persecution. Men, who would have stood in awe of a well-ordered government, and who would have trembled at a severe one, embraced those opportunities of obtaining credit for courage and fortitude which they did not possess.

We have endeavoured to give our readers some idea of the view which M. Puissaye takes of the causes of the French Revolution. For a more detailed statement of them, we must refer to the book itself. The general principle which he maintains is, that the germs of political disorder and confusion existed in every order and department of society, and that the causes which produced the calamities of France were such as have been observed, and will be observed in the dissolution of every empire.

‘Men of all countries and of all ages’ says our author ‘who shall one day read the history of the misfortunes of France, will only have to change the names, and those subordinate circumstances which are varied

ried by time, place and accident, and they will read the history of their fathers, of their descendants, or perhaps of their own era.*

The result of M. Puissaye's reasoning is, that a foundation had long before been laid for the French revolution; and if the same opening had presented itself, a political change of the same magnitude might have taken place in the time of Lewis XV. These observations bring forcibly to our recollection a striking passage in one of Lord Chesterfield's letters. After taking notice of the changes which had taken place in the opinions of the French nation, upon matters of religion and government, his Lordship concludes: 'In short, all the symptoms which I have ever met with in history, previous to great changes and revolutions in government, now exist and daily increase in France.'* This opinion was delivered at a time when many persons, deceived by the exterior splendour of the French monarchy, considered it as fixed on the surest foundations, and when disappointed politicians lamented the instability of a mixed government.

The preliminary part of the work before us presents so large a field for observation, that we feel ourselves obliged to omit many discussions which the perusal of it has suggested. There is one fact which we have already taken notice of, which appears well worthy of observation; that a striking difference was perceived between the conduct of those provinces which possessed some shadow of a free government, and that of those which enjoyed no protection against the inroads of arbitrary power,—that these provinces afterwards showed a superior degree of energy and resolution in arming themselves against the tyrannical measures of the revolutionary government. This fact is peculiarly important, from the striking illustration it affords of the energy with which men possessed of rights and of privileges may be expected to act, when they are forced into a contest with tyranny and oppression.

Another fact of the same description occurs in the course of the narrative. The emissaries of the convention endeavoured to stir up the people of Normandy, by proposing an agrarian law; a doctrine which has so many charms for the lower ranks of every society. The landholders in this province were, however, so much more numerous than in other parts of France, that the orators found themselves obliged to relinquish that topic, and were in danger of being destroyed even by the populace whom they had endeavoured to seduce.

We shall now lay before our readers, some of M. Puissaye's reflections upon the particular events which preceded the Revolution,

* December 25. 1753.

lution, during the reign of Lewis XVI. Our author pronounces a most eloquent eulogium upon that unfortunate Monarch; and ascribes his misfortunes to the meanness and perfidy of his courtiers. We are told, that when they deceived him, they availed themselves of his love of justice, his regard for worth, and his diffidence in his own talents. The Queen is described as possessing every thing which could render her an object of love and admiration. But she was surrounded by courtiers, whose composition was perfidy, whose profession was deceit. They had recourse to every art, and assumed every disguise; and seemed by turns humane, compassionate, disinterested, enthusiastic in behalf of virtue, and indignant at vice. In the midst of such a scene of deception, it was almost impossible for persons of virtue to approach. All lucrative situations were secured by the flatterers; but from the divisions which took place amongst them, the ministry was always in too precarious a situation to be an object of their ambition. They preferred the advantage of disposing of it, to the risk of possessing it.

The events which more immediately led to the Revolution, are already known to our readers.* Our author's remarks upon them are those of a dispassionate observer. The only character to which he discovers any partiality, is that of M. Calonne; and he records some anecdotes,† that reflect great honour upon the memory of that unfortunate statesman.

M. Puissaye concludes the general view he takes of the causes of the Revolution, with observing, that although his speculations upon them may appear very remote from the history of his life, he conceived it necessary to enable his contemporaries to judge of his conduct since the Revolution, by putting them in possession of the opinions and principles which he held before it. He then enters upon his private history. He is descended of one of the most distinguished families in Perché, and was originally destined for the church; but abandoned his studies at an early age, and obtained a commission in a regiment of cavalry. He afterwards left the army, and married in 1788. In the year following, he was elected to represent the nobility of Perché in the States-General, without any solicitation on his part. The instructions with which he was then provided were, to renounce for his constituents all claim to pecuniary immunities; but not to consent to any impost until the constitution should be settled upon the basis of an acknowledgement of the inherent powers of the States-General to make laws and impose taxes. It was recommended to him to support the division of the States into separate deliberative bodies.

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The first question which divided the Nobles was, whether the powers they received from their constituents should be examined by all the orders, or by each order separately? Both the majority and minority of the Chamber of Nobles considered this as decisive of the great question, whether the three orders should deliberate together, or separately? Our author, with a degree of refinement which such questions do not appear to admit, voted for having the powers of each representative examined by all the orders, though he, upon all occasions, declared his resolution to oppose the legislative junction of the three orders. In vindication of this conduct, M. Puissaye maintains, that every member of the assembly had a just right to be satisfied with the powers of those who exercised legislative functions. The question he considered as in itself too trifling to be contested, and as likely to exasperate the third estate, from whom more substantial concessions were to be required. We must observe, that, independently of the endless disputes to which such an examination would give rise, the members of every representative body are best acquainted with the rights of their constituents, and are most interested to preserve them. It may sometimes be necessary, in order to counteract the effects of partiality and intrigue, to delegate such a task to a smaller number, on whom the restraints of character and responsibility may operate more powerfully. But it never can be a wise measure, to place minute and tedious investigations in the hands of a more numerous body. Neither can we agree with M. Puissaye, that such a concession was likely to produce any good effects.

Our author gives many striking instances of the intrigues and cabals which prevailed at this time. He complains loudly of the monotony of talents which prevailed, and of the want of a man of commanding genius, able to awe and repress the silly orators, who daily came forward, and who were ready to sacrifice every principle to the pleasure of making a speech. What our author lamented, was a matter of exultation to others. A courtier who sat near M. Puissaye could not conceal his satisfaction 'at having as yet heard nothing which made him feel any apprehensions;' and added, that 'he began to think that he would have some weight.' Vol. I. p. 223.

M. Puissaye then illustrates his favourite position, that the downfall of the monarchy cannot be attributed to the effort of any individual, or of any party, by a sketch which he draws of Orleans.* It is too long to lay before our readers; but we strongly recommend

* Vol. I. p. 238.

mend it to their perusal, as showing uncommon acuteness, and great powers of observation. The conclusion which he forms is, that no party existed during the first years of the Revolution. No faction possessed that degree of union, attachment, or mutual co-operation which could entitle them to such appellation. The Orleans faction, he observes, so far from forming a party, to which the fall of the state can be attributed, was merely the result of the general relaxation of order, and the imbecillity of the government.

M. Puissaye, from having voted with the minority on the first question, was invited to attend their meetings, and was at last persuaded to go to one held at the Marquis of Montesquieu's, master of the horse to Monsieur, now Lewis XVIII. He was then surprised to find, along with the deputies of the minority, at least an equal number of those who in public acted along with the majority. Nothing remarkable took place at this meeting, or nothing which could induce our author to vary from the principles which he had already adopted, of avoiding all political connexions. In conformity with the instructions of his constituents, and his own opinion, he steadily opposed the measure of uniting the three orders into one chamber. This important measure was at length agreed to by the Court, after a feeble show of opposition, which deprived them of any temporary popularity which so important a concession might have produced. Our author considered this as a measure which was calculated to lead to all the disorders which afterwards took place; and his first resolution was to resign his seat, and retire to his province, until he should be called upon to act. By the advice of his friends, however, and the entreaties of his constituents, he was prevailed upon to remain; but when he returned to the Assembly, he gave in a protest against the union of the three orders, and refused to deliver up the instructions of his constituents. After giving an account of the violent measures which were daily adopted by the Assembly, our author enlarges upon the disgraceful partiality with which they passed over the riots of the 5th and 6th of October, in which, according to the report of the *Chatelet*, the Duke of Orleans, Mirabeau, and many others of the Assembly, were deeply implicated. Some of the minority signed a protest against it. Our author, who had not been acquainted with their intentions, drew up a declaration of the same nature for himself, which was inserted in the *Gazette of Paris*. * M. Puissaye complains that
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* M. Puissaye cautions the reader against confounding the *Gazette de Paris* with the *Journal de Paris*,—papers diametrically opposite.

some of the agents of the Royalist party at Paris afterwards endeavoured to spread a report, that he had belonged to the faction of Orleans; and he refers to a letter from *Brothier* and *La Villebournay*, which proves that they wrote to him that they intended to reprint M. Puissaye's declaration, and to distribute it anew, at the very moment when they were privately propagating these falsehoods. This, our author observes, is but a small specimen of the intrigues and infamous devices by which he has been assailed for a long course of years.

Though M. Puissaye had retained his seat in compliance with the wishes of his constituents, and occasionally attended the meetings of the National Assembly, he determined to take no active share in its deliberations. He felt that even reason, eloquence, and truth, could have no effect upon men who were determined to resist conviction; and he therefore resolved not to sanction the proceedings of an Assembly which he considered as illegal, by becoming one of its orators. He then lays before his readers a letter addressed to the *Compte d'Artois*, in 1797, in which he vindicates himself from the charge of having sat on the left side of the Assembly. He throughout kept the same seat which had been appointed for him as a representative of the nobility; and when the members afterwards came to arrange themselves according to their factions, the one upon the extremity of the left side, and the others upon the right, he, along with some other representatives of the nobility, retained the seat which had been originally assigned him. He conceived that struggles and intrigues in that place could now be of no avail; and he endeavoured to form those connexions which might be of use in the more serious contest which he foresaw to be approaching. He occasionally attended the Assembly, to prevent any suspicions being entertained with regard to him; but he refused to become a member of any of the committees for which he was elected, and avoided all connexion with clubs or secret assemblies. When the King came to the Assembly, M. Puissaye took the constitutional oath along with the other members. He was, however, by no means blind to the glaring defects which that Constitution contained. After expressing his contempt for its authors, and enumerating its defects, he observes—

‘ This is, however, that constitution which I have sworn to maintain along with twenty-nine thirtieths of France. I do not blame those who refused to do so; but I considered it as the last resource, as the only weak prop which might still support for a time the state, which was already on the point of dissolution: and I have not hesitated to sacrifice my own ideas and personal interest to that motive.’ Vol. I. p. 372.

The state of affairs, at this period, was widely different from what it was at the commencement of the Revolution, when delay and uncertainty were most pernicious ; but, now, it was by delay alone that a favourable opportunity could be obtained. The next remarkable circumstance which occurred after the King's acceptance of the constitution, was his flight to Varennes ; a step, which was occasioned by the outrages of the one party, and the solicitations of the other. Our author observes, that on this, as well as on many other occasions, the Royalist party adopted the very measures which their enemies wished them to take. After the King's flight to Varennes, and his arrest, he no longer enjoyed even the appearance of freedom which made his orders binding ; and our author felt that the constitutional oath was annulled in point of fact, and that the time was come when force alone could rescue France from the abyss in which it was almost swallowed up. Our author had to chuse between two measures—that of emigration or insurrection ; and he preferred the latter. Subsequent events, he assures us, have not affected his opinion upon that subject. He felt that it was his duty to save his King and his country ; and it did not occur to him to begin by abandoning both. (Vol. II. p. 6.) The interior of the kingdom offered much greater resources for the formation of a Royalist army ; and the measure of assembling an army in a foreign country, where they must be entirely dependent on the powers with which they connected themselves, was calculated to defeat the success of the plan.

M. Puissaye enters into a discussion of the policy which it was expedient for foreign nations to observe when the French Revolution broke out ; and he maintains, that the true interest of foreign powers was to avoid all offensive measures, and to form a defensive league to prevent any encroachment upon the part of the Revolutionary government. Before the Revolution, France was an object of jealousy to the other powers of Europe, from the extent of its territory, and the character of its population. When it changed its government, it was likely to become still more formidable. Offensive operations were, however, directly calculated to increase the power of the Revolutionary rulers, and to afford the means of forcing various classes of men to concur in their measures, who were otherwise disposed to oppose them. The same conclusions are drawn from a particular consideration of the policy of each individual nation. The combined powers, according to M. Puissaye, deviated from that policy, from views of aggrandisement which they were encouraged to entertain from the assurances they received of the weakness of the French government. The retreat
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of the Duke of Brunswick, which has often been considered as so great a mystery, may thus be explained upon obvious principles. He entered France with the idea that he was to meet troops without courage or discipline, and an army whose officers were either ignorant of their profession, or disposed to betray them. The arrangement which had been made in that persuasion, and the expectations which had been built upon it, fell at once to the ground, when he found himself opposed by an army commanded by a most skilful general, who, after retreating from one strong position, was able to occupy another still more formidable. It is natural to suppose, that Prussia then perceived its mistake, and returned to that system of policy which she ought at first to have observed. It is no way improbable, however, that many secret intrigues may have taken place at this period. They would depend upon the state of the Prussian Court, and may have been as extraordinary and as mysterious as some writers have represented them. They are however to be considered, in that instance, as the result of a change of policy which naturally took place when that power discovered the gross error upon which it had proceeded, and not as the causes which produced it.

M. Puissaye, although he exposes the errors committed by the emigrants, professes the highest veneration for many individuals who were the victims of a high sense of honour, and of the most disinterested attachment to the cause of Royalty. The measure of emigrating, he observes, was adopted at the instigation of men who were strongly influenced by their own personal situation; whereas those who were able to remain in France, and who were by far the most numerous body, were the persons whose interests ought to have been principally consulted. M. Puissaye calculates that the emigrant army, before it was dismissed, amounted to no more than 30,000 men; while some insulated individuals in *Poitou*, in *Brittany*, and *Anjou*, raised at different times upwards of 500,000 men. M. Puissaye therefore conceives that he does not overrate the magnitude of the army which might have been raised, if the French noblemen had remained in the country, when he states it at a million. He then answers the objection, that if the nobles had remained in the country, they would have been massacred in detail without being able to make any resistance. He observes, that the greater part of those who emigrated, were obliged to leave their aged relations, their wives, and their children behind them, exposed to all the violence of the reigning tyrants; and from his own experience, he declares, that the republicans were not so much disposed to indulge in massacre or pillage, when they knew there

there was a powerful party in the country able to retaliate upon their persons and their property. In justice to the emigrant armies, he observes, that their conduct has sufficiently shown, that the nobility of France were eager to expose their lives, where that could promote the success of their cause: And if they had remained in the country, many of the massacres would have been prevented by the apprehensions of the cowardly assassins who effected them. If the emigrants had remained in the country, they would have had no occasion to court the protection of foreign powers; and therefore any negotiations they entered into with them, would have been made upon a more independent footing, and they might have acted in concert with them without injuring their own cause.

M. Puissaye endeavoured to follow out the views of insurrection which he had formed. The inhabitants of *Meuilles*, who were sufficiently numerous to form a battalion, unanimously chose him their commander. The district of *Devereux* afterwards had recourse to him to superintend its organization, and he obtained the command of about 4000 men. The measure of emigration now came to operate generally, and those who resorted to that measure adopted it with enthusiasm: on the other hand, those who did not concur in it, became violent on the other side. The refusal of invitations to emigrate produced reproaches, which were followed by threats. The Royalists even went so far as to keep lists of the dates of emigrations; and a week sooner or later was held to form a shade of difference in their pretensions. So confident were they of success, that they considered those who were late in joining them, as intruders among those on whom the rewards of the restoration were to be bestowed. In these circumstances, few men could remain neutral, except those feeble spirits who, in times of distraction, endeavour to save themselves by keeping up connexions with both parties. The number of such men, we are told, was immense (Vol. II. 68, 69.); and it was only in Brittany, Poitou, Anjou, and some of the southern parts of France, that any energy was shown. M. Puissaye, however, found a sufficient number of men whom he could depend upon, to entrust with the most important stations. All that he could do with the rest, was to lead them indirectly to the object he had in view. While he was employed in procuring the information, and forming the arrangements necessary for his purpose, the horrors of the 10th of August took place. The electoral assemblies were at that time convoked, to elect their representatives in the Convention. M. Puissaye was upon the point of being chosen; but the Jacobins had recourse to an

an intrigue, which prevented his election. Our author declares, that although he took no steps to obtain votes, he would have accepted the situation. He had no longer the same motives to restrain him from acting, which had operated so powerfully upon him in the Constituent Assembly; and he thought that his efforts might have contributed to preserve the life of the King, and that the situation would have been favourable to the plans he had in view.

Baron Wimpffen, the defender of *Tbionville*, was one of the persons whose assistance M. Puissaye was most desirous to procure. He did not at once disclose to him his ultimate designs, but proposed to him the measure of raising an army of the line in Normandy. He represented to him the probability, that undisciplined troops raised in other parts, would be sent there under the command of some ignorant and inexperienced Jacobin, and that this inconvenience would be avoided by raising an army entirely composed of men in the country commanded by M. Wimpffen. M. Puissaye engaged to get the two departments of *POrne* and *P'Eure* to propose the plan, while Wimpffen undertook for the departments of *Calvados* and *La Manche*. M. Wimpffen appeared to enter into all his views, and M. Puissaye entertained hopes of saving the King, which were soon afterwards disappointed by his sudden trial and execution. After this event, General Wimpffen was chosen commander of the army which was to be raised in Normandy, and our author was placed at the head of his staff. The army was to consist of 17 or 18,000 infantry and 3000 cavalry. There was at that time at *Caen* a regiment of light cavalry newly raised, commanded by Colonel *Dumont*, a brave and loyal officer.

While M. Puissaye was employed in carrying on these arrangements, the downfall of the *Girondists* took place. The members of that party who escaped from Paris, endeavoured to prevail upon the provinces to take up arms in their behalf. M. Puissaye had no attachment to their characters or plans; and declares he has no doubt that, if they had succeeded, they would have subjected France to a tyranny not less odious than that which was ultimately imposed upon it, though probably more permanent, as the work of greater reflection. In the present state of his preparations, he felt that adopting their cause would be ruinous to his designs; though, if his preparations had been farther advanced, he might have availed himself of the opportunity to overthrow the power of the convention. He was invited to attend a general assembly of the members of the districts and municipalities at *Alençon*; and the meeting seemed disposed

to adopt the cause of the fugitives, when his opinion was asked. He prevailed upon them to take no farther step than that of sending deputies to consult with the other departments. He was prevailed upon to go as one of these deputies; and on his way he received intelligence that *Wimpffen* had been forced to accept the command of the insurrection, and that when he at first refused to do so, his life was threatened. M. Puissaye felt himself called upon to abandon his own opinion, and join his commander. When they met, *Wimpffen* confirmed the accounts which he had received upon the road, and, from the language he held, showed he had no expectation of success. M. Puissaye now felt himself bound to use every exertion to support his friend and commander. When he returned to *Alençon*, he found that a material change had taken place in the sentiments of the people. The Jacobins had used every measure to make themselves popular; and M. Puissaye was reminded that he had held very different sentiments a few days before. It was in vain he represented that the other departments had not at that time declared themselves, and that it was necessary to do nothing with precipitation; but that after having determined, it was their interest and duty to join in a cause which was now no longer that of individuals. The intrigues and money of the Convention, however, prevailed, and it was with difficulty that our author escaped from *Alençon*.

The events which followed are minutely detailed, and are such as might be expected to take place in an insurrection of men, whose sentiments and ideas were so widely different. *Scharer* afterwards minister of war, was appointed to command the troops opposed to them by the Convention. M. Puissaye was sent to stop his march; and took the post of *Cosheril* after a slight resistance. In this command he had many difficulties to contend with. Each of the battalions of volunteers brought along with them one or two commissaries from their respective departments, who claimed a right to direct, or at least to be consulted upon all occasions. *Bougon*, procureur-general of the department of *Calvados*, was particularly absurd and troublesome. Some persons suspected him of holding a correspondence with the Convention. M. Puissaye acquits him of that charge; but, at the same time describes him as one of those vain and weak characters, who, while they grasp at every personal advantage, in case their party shall succeed, endeavour to secure a retreat in case of failure. When M. Puissaye determined to attack the enemy, *Bougon*, after using every expedient to prevent a measure so opposite to his sentiments, consoled himself, by drawing up a proclamation, which
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he insisted on having read, even after the enemy had begun their fire, in order, as he said, that it might at least be known that *they had begun first*. The engagement took place upon the 14th of July, near the Castle of *Brécourt*, which is situated between the forests of *Vernon* and *Pacy*. The troops of the Convention began the attack. They were, however, thrown into confusion upon the first charge. M. Puissaye was then desirous to pursue them; but he found that his cavalry, who were not accustomed to the sound of cannon, were thrown into confusion—the enemy got into the woods—and the commissaries insisted upon the danger of ambuscades and masked batteries in case they pursued. M. Puissaye then wished to return to *Pacy*, where he would be secure from surprise; but the commissaries opposed this also, and magnanimously insisted upon keeping possession of the field of battle. After giving orders for placing the proper guards, M. Puissaye, who had suffered severely from excessive fatigue and the heat of the weather, which had brought on an attack of the erysipelas, had not been above two hours in bed, when he was awaked by an attack of the enemy. Finding that they were not pursued, the Conventional troops had rallied, and had passed the outposts, without being perceived by the guards, who had fallen asleep. The greater part of M. Puissaye's troops immediately took flight, and cried out they were betrayed. One corps alone remained. In the midst of the confusion, M. Puissaye, with some difficulty, got two guns pointed at the enemy, which dismounted one of their cannon. They immediately ceased firing, took to flight, and their cavalry did not stop until it arrived near Versailles. The confusion on the part of the victorious troops was however irretrievable. Although there was no enemy near them, no persuasion could induce them to return to the ground they had occupied. Even the patrols that were sent out, were so much terrified, that before they had gone a mile and a half, they returned with assurances that the enemy was in their immediate neighbourhood. This panic was decisive of the fate of the insurrection. The money distributed by the emissaries of the Convention completed what terror had begun; and M. Puissaye was obliged to follow his troops to Evereux, and afterwards to Caën. *Wimpffen* proposed, if he could have obtained a thousand men, to have maintained a strong position before Caën; but none were willing to engage in the service, and they were obliged to separate.

The whole of these transactions are extremely characteristic of the state of the country, and of the conduct of the persons and troops engaged in the business, upon both sides. The insurgents either retired to places of concealment, or endeavoured to obtain terms from the Convention.

entered Rennes, and made all that affected display of humanity which the revolutionary cut-throats at one time thought proper to profess. Transparent lamps, representing the national colours, were hung up in the streets upon a rejoicing which took place. *Carrier* went up and down the streets breaking with his stick those transparencies which were red. 'That colour,' said he, 'fills me with horror—it conveys ideas of blood.' *Carrier* held this language! Vol. II. p. 216.

M. Puissaye, with some other associates, retired into Brittany, where he remained for some time in concealment. We do not wish to diminish the interest our readers will take in reading the book, by anticipating the account of the many escapes and adventures he passed through. He found a great party of the people discontented with the Convention, and others decided Royalists. Most of their priests still remained among them in disguise, and were concealed in mines and places under ground. M. Puissaye vindicates them from the charge which has been made against them, of endeavouring to excite their parishioners to revolt, by employing tricks and fanatical devices. Our author declares, that in the midst of all their persecutions, they uniformly preached doctrines of the purest morality. M. Puissaye gradually obtained the confidence of the people among whom he was concealed, and was invited to place himself at their head. His plan was, to form his partizans into very small parties, and to accustom them gradually to face an enemy. He was aware, that if men are undisciplined, it is impossible for them to act with effect in large bodies. His reflections upon this subject, though they have rather the air of a moralist than of a revolutionary leader, show great powers of discrimination.

'True courage,' he observes, 'is the result of reflection. It is a prostitution of that word to apply it to the effects of any passion, although they sometimes supply its place. Experience confirms and develops it. I have seen a man who had run away before my eyes at the first sound of a shot, after some experience face the greatest dangers with intrepidity. It is absurd to say such a nation is brave—such another is not. There is not a nation, on the face of the earth, which has not at some periods been distinguished for its valour. If we go back to those periods, we shall see, that this courage, so much celebrated, proceeded from long service. There is no more merit in being brave after a few battles, than in making good shoes after a long apprenticeship. A soldier is formed like an artizan. The first National Guards of France began by flying tumultuously before the allied armies. Hardened by experience, they would have removed the frontiers of their country to the boundaries of Europe, and overturned the world. In this respect, those powers, whose armies took but a small share

share in the last war, have lost more than they are aware of, in case, what is more than probable, Europe shall again become the theatre of war, before the other nations shall have lost, by repose and tranquillity, the incalculable superiority they have received. 'This observation the accuracy of which is proved by every day's experience, confirmed me in my fixed resolution never to expose myself to an important defeat by assembling too great bodies together, and to spare the lives of men who although at first timid, and perhaps, even on a second occasion not much at their ease, would sooner or later become excellent soldiers. On this account, I had at first introduced the custom of dispersing, if victory did not very soon declare itself in our favour. 'All the roads and by-paths were known to our troops; the enemy, who were ignorant of them, found it impossible to pursue; and the inhabitants of the country either gave them false information; or conducted them into ambuscades. When the enemy was broken, that circumstance operated against them. Their defeats were followed with slaughter. Those of the Royalists did not cost them the life of a man.' Vol. II. p. 416.

From other passages which occur in these Memoirs, these remarks must be understood with considerable limitations, and as applying only to the mechanical or instinctive influence of fear. M. Puissaye seems fully aware of the powerful effect of moral motives upon the conduct of men, in enabling them to act with superior courage and energy. In the course of these Memoirs, he frequently celebrates the heroic qualities of his countrywomen. Upon most occasions he employed them to reconnoitre the enemy, and to procure intelligence, and they executed their trust with great intrepidity and address.

The tyranny of the Convention, and the cruelties exercised by the Jacobins, greatly augmented the numbers of M. Puissaye's partizans. The frequent executions which took place, while they awed the inhabitants of the towns, roused the inhabitants of the country to revolt. The victims were by no means selected from the higher ranks of the people: the lowest classes suffered equally. After the decree which was passed against what were called the enemies of the people, persons of all descriptions were involved in the massacres which took place. The first person who was condemned in consequence of this decree, was a hackney-coachman, accused of having formed a conspiracy against the people. M. Puissaye assures us, (vol. II. p. 491.), that besides the regulations which carried away men of these classes from their wives and children, and the blood they shed in order to raise a few of their pretended friends to situations in which they insulted their misery, nine-tenths of the victims who perished on the revolutionary scaffolds, in *royades* and *fusillades*, were composed of the lowest classes of the people. Amidst the many melancholy reflections to which the perusal of these state-

ments must naturally give rise, the mind is somewhat relieved by the many instances which are related of humanity, fidelity, and heroism upon the part of the lower ranks. At a time when the tyranny exercised by the Jacobins was such, that the discovery of any article of dress of a finer texture, a shirt or a piece of fine linen, was sufficient ground for condemning the inhabitants of the houses, M. Puissaye met with kindness, fidelity, and protection. In all the plans which he afterwards formed, the great cause of his success was the tyranny of the Jacobins; and the most formidable obstacles he encountered, arose from the imprudence of the emigrants, and the conduct of the allied powers. Political information was now widely diffused through all ranks of the people. They required some assurance that the threats originally held out by the Royalists should not be realized, and that the abuses of the old government should not be restored. M. Puissaye observes, that the French princes have been strangely deceived when they were told (p. 395.) that a word or an order was sufficient to put all the Royalists in France in motion. This was not language to be held, when they were not able to afford protection or offer rewards, and had not a gun or a piece of money to bestow. M. Puissaye observes, that

— attachment to principles, love of your country and your king, and devotion to the cause of religion and of the laws, are assuredly respectable and powerful principles; but it is chimerical to suppose that they are sufficient, if they are not supported by the feeling of individual interest, which is ennobled by these motives. That feeling is necessary to bind together a mass composed of such various and unequal materials. I have seen few Royalists who have not suffered more or less from the effects of the Revolution. I have not seen one of the partizans of that party who did not expect to gain more or less by declaring in favour of it.

There appears a great deal of truth in these observations, though it will not be easy to persuade princes of their justice.

M. Puissaye steadily adhered to his plan of organizing a large force, and avoiding any great enterprise, until he should have a reasonable prospect of success. In order to complete his arrangements, he left the departments of *Ile* and *Vilaine*, in which he had chiefly resided, and traversed that of *Morbihan*. After having acquired the necessary information, he set out, on the 15th of September 1794, for England, in order to concert measures for a co-operation upon the part of that power.

These interesting Memoirs here terminate where they become most important; and it is with some anxiety we look for the continuation of them which is promised, and which will include an account of the events which led to the peace of *Prevalaye*, and the fate of the expedition to Quiberon.

It would be premature to offer any observations upon M. Puissaye's conduct, before we are possessed of the subsequent part of his Memoirs. It is in that part we expect to find an answer to the most important charges which have been brought against him. We have no hesitation in recommending these two volumes to our readers as the work of a man of very superior talents. The occasion upon which they are written, and the situation in which they were composed, are a sufficient excuse for many defects which a little care and attention might have removed. We cannot help, however, expressing our regret that an author who is able to write so well, should have so frequently fallen into that diffuse and declamatory style which has for many years been too prevalent among French writers.

The political reflections which are made in the course of these Memoirs, are a sufficient proof that the author is possessed of an acute and penetrating understanding, which has been carefully cultivated; and we are anxious for the continuation of a work from which we expect to derive much interesting and curious information.

ART. VIII. *Specimens of British Minerals, selected from the Cabinet of Philip Rashleigh, of Menabilly, Esq. M. P., F. R. S. & F. A. S.* London. Part I, 1797. Part II, 1802. Quarto.

THEY are truly wise, who, when possessed of the rarer products of nature or of art, are liberal enough to gratify public curiosity. Gold has no value in the strong-box; it is only when put into circulation that it repays the toils of acquisition; and rarities are only valuable to most collectors, in proportion to the current coin of admiration for which the sight of them can be exchanged; and this species of barter is so agreeable and advantageous to both parties, that no means should be neglected to encourage and extend it.

The remote situation of Menabilly prevents many mineralogists from availing themselves of the liberality with which Mr Rashleigh exhibits his collection of minerals. With a highly laudable disposition to diffuse information, he has published this work, decorated by delineations of select specimens, and illustrated by short descriptions of the minerals, and indications of their localities. He modestly disclaims an intimate acquaintance with the refinements of modern mineralogy and chemistry; and, contented with a simple statement of facts, leaves to his readers the amusement of accommodating them to their favourite hypothesis.

We need not bestow any particular consideration on the text, which is obviously introduced merely to render the plates intelligible.

gible. The few explanatory observations are so unobtrusive and unpretending, that they afford little room for remark; and though we regret that they leave us with only limited information of the objects they mention, we cannot justly complain of that being only imperfectly done, the performance of which we had no reason to expect. Though the modern changes in chemical nomenclature may not be familiar to the writer, yet we may observe, that as his work is chiefly intended for the amusement and instruction of those who are remote from Cornwall, he should not have used the technical provincialisms without explanation. We fear that to the inhabitants of the greater part of Britain, *lodes* and *eluvies* will sound rather unintelligible.

The plates form the most important part of this work, and upon them we shall venture some observations. There is no department of natural history which has not been made the subject of paintings; but all its branches are not equally capable of being illustrated by the imitative art. Generally speaking, there is no visible object, of which painting cannot communicate a more or less perfect idea; but the important application of such representations to scientific purposes, must depend on the facility and precision with which the essential characteristics of the object can be expressed. The three great divisions of natural objects are very variously susceptible of illustration from painting. Of animals it affords the most correct and intelligible description; for nearly all their characteristics are easily and distinctly represented; and so trifling are the differences between those of the same kind, that a species is easily recognised from the portrait of an individual. The diversities of vegetables of the same species being greater than those of animals, and the essential characteristics being lodged in the parts of fructification, which are often so minute as not to be expressed by the pencil with proper distinctness, render their delineation a less perfect description. In vegetables, however, as well as animals, the essentials are always apparent; and the application of painting to their description is only regulated by the facility of the representation. But in minerals, the essential characteristic seldom resides in the visible external characters, except in cases of accurate crystallization. The hardness, the specific gravity, the tenacity, must all be known; the fracture remains for painting, but even that cannot be expressed with any correct resemblance of the natural appearance. Colour may indeed be approximated; but in minerals, it is of all characters the most unimportant, and the peculiarities of lustre, which are of more consequence, are proportionably difficult to represent. It is not enough that a general similitude be attained. Place the object itself at a small distance,

distance, and no mineralogist can ascertain its species. It may be cinnabar, or red copper, or iron ore, or red jasper, or a piece of brick. A near and minute examination of texture, colour, and lustre, may reveal what the substance is; but, let the painter attempt to transfer these peculiarities to his canvas, and the patience of a Mœris or a Gerrard David will sink in the attempt. Delineation can only be essentially advantageous to mineralogy, by tracing crystalline forms with precision; but, for that purpose, the ruler and compasses are wanted—away with the pencil and colours.

The splendid volumes before us afford a striking illustration of these remarks. Almost every one of the highly coloured plates which it contains, bears a strong general resemblance to the delineated object. To the superficial observer, this may appear quite enough; and to those who merely look at minerals as children do at pictures, to regale their eyes with vivid colours, this work will be a treasure. Surely it was not for their use only that it was designed; and yet we fear few others will find it profitable.

We cannot attribute this failure (for such we must consider it) to any neglect on the part of Mr Rashleigh to give his book every perfection of which it was susceptible. The style in which the plates are executed, proves him to have employed an artist of considerable ability, who has only failed, in not being able to extend the empire of painting over a province which we fear will ever refuse her sway. He has, however, given us many brilliant and beautiful, if not characteristic and instructive engravings; and the delineations of two organic bodies, a fossil bivalve shell and an echinus, serve to illustrate his own skill, and define the boundaries of his art.

He seems very naturally to have shrunk from the difficulties of his undertaking, and to have preferred a general felicity of effect, to an accuracy which, however desirable, prodigious labour might have failed in attaining; to have dashed out groups of crystals with daring indistinctness, and to have trusted to the outline of a detached crystal, magnified, for conveying a more correct idea of the object intended to be represented. Even these detached figures are inaccurately drawn; and the artist seems to have depended more on delicate tints, than on the correctness of his forms.

Though the colours that adorn some minerals are superb, it must not be imagined that every specimen glows with the prismatic hues, though this is an opinion which the greater number of these prints is calculated to disseminate. Yet some allowance must be made for the inaccuracy of the inferior artists who are

employed to transfer to prints the tints of an original drawing.

The minerals represented in this work are mostly extracted from the mines of Cornwall, and not a few of them are peculiar to that district. The fibrous tin ore, very improperly called wood tin, has never been found elsewhere: and the continental mines have only produced very imperfect specimens of arseniate of copper, a substance whose beautiful and numerous varieties have been the subject of the accurate analysis of Mr Chenevix, and of a crystallographical description by the Count de Bourçon, in the Philosophical Transactions. Mr Rashleigh has favoured us with a drawing of hydrophanous chalcedony investing tin ore. We are surprised that the beautiful stalactitic capillary and investing chalcedonies of Trevaskus mine have been omitted by him, and that he has given us no drawing of the schorls, of which Cornwall produces beautiful specimens. The phosphates of lime adhering to talc, present some of the rare crystalline modifications; but no notice is taken of them, or of the capillary native silver of Hexland mine, or of many other singular products of the country. Such minerals would, we think, have proved more generally interesting than the Derbyshire calcareous spars and fluors, or the fossil shell and the echinus in fluid, which last is far from appearing to us a clear demonstration of the Neptunian origin of the flint. The agency of the aqueous formation would have been more strikingly illustrated by some of the specimens of martial pyrites investing pieces of unaltered wood, and sometimes completely assuming its form, by pervading its substance; which are abundantly found in the peat that covers the gravel mixed with tin ore at the steam work at Carnon.

ART IX. *A System of Chemistry.* In Four Volumes. By Thomas Thomson, M.D. Lecturer on Chemistry in Edinburgh. The Second Edition. Edinburgh: Printed for Bell & Bradfute and F. Balfour; G. & J. Robinson, London; and Gilbert & Hodges, Dublin. 4 vol. 8vo. 2638 pages.

THE first edition of this work was published a little while before the commencement of our undertaking; and we are much pleased to find that its success has been so great, as already to give us an opportunity of noticing it in its present improved state. With the very great merits of the former edition we were well acquainted; and must regret, with every lover of the science, that it met even with one solitary instance of uncandid severity.

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We perused the first part of the preface with much satisfaction. We admired the author's spirited defence of the state of chemistry in Britain, against the misrepresentations of foreigners; and fully subscribed to the just encomium which he finds it necessary to pronounce on his own merits. The second part, however, in which he in some measure develops the plan of his work, rather checked our growing partiality; for, instead of returning thanks to our fellow labourers on the other side of the Tweed, for the almost unqualified approbation which they bestowed on his former edition, or soliciting the same attention to the present, he boldly sets our whole corporation at defiance, and denies the competency of our tribunal. Indeed, it is not difficult to discover that it is the Doctor's honest opinion, that no person is qualified to judge of his performance but himself; for who else is there 'who has the same turn of thinking, who possesses the same information, and who has bestowed on the subject the same patient meditation?' In the description of those capable of criticising his arrangement, he is, if possible, still more fastidious. They must not only possess all the necessary mental qualifications, but they must be authors or teachers, and must have no arrangement of their own. In short, Dr Thomson's arrangement must not be criticised. But if, in our author's opinion, extraordinary qualifications be necessary to judge of his plan and arrangement, still more extraordinary abilities were necessary to contrive it. 'Few consider that the art of arranging is one of the most difficult tasks of the philosopher; that it requires a comprehensiveness of mind, a clearness of judgment, and a patience of labour, which fall to the lot of a small number only of the human race.' Whatever Dr Thomson may think of his own abilities, compared with those of other men, there is certainly some degree of imprudence in this publication of his sentiments; for he ought to be aware, that though men may sometimes forget to applaud the modesty of an author, they never fail to resent his arrogance.

'The object of this work is to exhibit as complete a view as possible of the present state of chemistry, and to trace at the same time its gradual progress, from its first dawnings as a science, to the improved state which it has now attained.' It also comprehends 'the application of that science to substances as they exist in nature, constituting the animal, vegetable, and mineral kingdoms.' The plan, abstractly considered, is excellent; but there have been, it seems, some people so narrow-minded, and others so extravagant in their ideas, as not to be pleased with it; the one set pretending that it contains too little, the other that it contains too much. These opposite opinions,

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our author thinks, refute and exactly neutralise each other, and suggest to him this very comfortable conclusion, that in all probability he has not deviated very far from that happy middle path which he ought to follow. But, in the fulness of his joy, he seems to have forgotten that these premises afford room for another conclusion, namely, that it may contain too much of what it should not contain, and too little of what it should contain; too little chemistry, for example, and too much extraneous matter. This, at least so far as regards the manner in which the plan is executed, appears to us to be really the case; but our reasons for entertaining this opinion, will appear as we proceed in the analysis of the work.

The work is divided into two principal parts; the first comprehending the science of chemistry, and the second the chemical examination of nature. The first part contains three books, which treat, in succession, of simple substances—of compound bodies—and of affinity. The two first classes are again divided and subdivided into orders and species. Nothing can be more simple, scientific and beautiful than the arrangement. Indeed, our author seems so much enamoured of it himself, that he gives it as his decided opinion, that 'if this work possess any superiority over others, if it be more perspicuous or complete, we must ascribe it to the arrangement.' The superiority of this book to most other systems of chemistry we are not disposed to deny; but we are less inclined to ascribe it to the merit of the arrangement, than to the circumstance of its having been written *after* all the other systems, and to the patient industry of the author, in observing and collecting facts. Indeed, so well has Dr Thomson availed himself of these advantages, that we have no doubt but his system will be considered as a valuable repository of facts long after the peculiarities of its arrangement shall be forgotten. It may appear strange, that we should value at so low a rate an arrangement which, we are told by its contriver, 'is independent of hypothesis, and as nearly inductive or analytical as was consistent with the state of the science,' which 'presupposes no previous knowledge of the subject, and begins with those parts which have been most successfully investigated, and which therefore admit of a plainer and simpler mode of illustration.' To the whole of this eulogium, however, we can by no means subscribe; on the contrary, we are inclined to think that an arrangement, possessing all the advantages he describes, is, in the present state of the science, impracticable; and that Dr Thomson himself has found it so.

The first peculiarity of Dr Thomson's arrangement, is the attempt to communicate the knowledge of a physical science in the same way in which it was originally acquired, by simply stating, in the

the first place, all the particular facts, and gradually ascertaining the general laws by induction. This method certainly possesses one evident advantage. The general principles of the science can be afterwards explained in the fullest and most satisfactory manner, as we are already in possession of the immense mass of facts from which they are derived, and by which they may be illustrated. But the disadvantages with which it is attended are infinitely greater. From having no general principles to direct us at the outset, the detail of facts must be dry and uninteresting; their relative importance cannot be perceived when they are stated; their connexion with each other will be overlooked, and they will be remembered with infinitely greater difficulty; while the general doctrines may be sufficiently explained by numberless familiar facts and illustrations, easily understood by every one entering on the study of chemistry. Thus, Dr Thomson himself, under the very first article, Oxygen, finds himself obliged to explain the general doctrine of Affinity; and under the second, Sulphur, gives an account of the different theories of combustion. We are therefore inclined still to prefer the common didactic method of first explaining the more general doctrines, to Dr Thomson's apparently more philosophical arrangement of arriving at all his general doctrines by induction.

The other peculiarity of Dr Thomson's arrangement, if we can call that a peculiarity which has been adopted by others, is the division of bodies into simple and compound. Now, the Doctor has told us, that 'very possibly the bodies, which we reckon simple, may be compound; but, till this has been actually proved, we have no right to suppose it;' and as some substances which have not been decomposed, are very analogous in their properties to others whose composition is ascertained, it necessarily follows, that if we arrange them among the compound bodies, our system becomes hypothetical; and if we rank them as simples, it becomes artificial and unnatural. Besides, there are very few, even of those which are considered as simple substances, which ever were the objects of any of our senses, except in a state of composition. Let us examine, for instance, those called simple substances by our author. His *unconfined* bodies, light and caloric, are refrangible, and may be decomposed into rays. Of the *confined* substances, the metals and simple combustibles, according to the hypothesis which our author adopts, are compounds of an unknown base and light. Azote and muriatic acid are suspected by him to be compounds. At any rate, they, as well as oxygen (the only remaining simple substance) never exist but in a state of combination.

But even granting, for the sake of argument, that the presence
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of the unconfined bodies does not make substances compound, which would otherwise be simple, Dr Thomson has found himself under the necessity of departing most materially from the principles of his arrangement, the moment he attempts to apply them. Two alkalies and nine earths, although they have never been decomposed, are classed by him among the compounds; and, on the contrary, of thirty-seven acids, three only have not been decomposed; and of these three, two are left among the compound bodies; while one, the muriatic, is separated from all the others, and placed among the simple substances. Nothing can demonstrate more forcibly that these principles are either fundamentally erroneous, or at least inapplicable in the present state of the science. The earths and alkalies are classed with compounds, not only on account of their analogy to ammonia, but because all other simple bodies, it seems, are connected together, either by common properties, or by the part which they act in combustion; whereas these have no such connexion. The latter of these two arguments is of no weight whatever; for it certainly does not follow, that because some simple bodies have an affinity for oxygen, all simple bodies must have such an affinity. The analogy to ammonia is not more satisfactory; for if Dr Thomson had followed up his own principles of arrangement, and divided compounds, as he has done simple bodies, into supporters, combustibles, and incombustibles, the substances in question must have been separated from ammonia; that alkali being combustible, and the earths and other alkalies incombustible. The analogical reasons for classing the muriatic acid among simple bodies, are still less convincing. 'Even muriatic acid,' says our author himself, 'though its resemblance to azote is striking, differs from it in so many particulars, that I dare not venture to separate it from the class of acids under which it has been hitherto arranged.' Since our author himself confesses that azote, and muriatic acid, differ in many particulars from each other, it will save us the trouble of proving it; but we must observe, that although he has not ventured to separate muriatic acid from the class of acids, an account of its characteristic properties occupies the second section of the chapter on *simple incombustibles*, while, in compliance with the usual custom of chemists, he has reserved an account of the properties of liquid muriatic acid for the chapter on acids, where it is again misplaced among the acid supporters. In all this, there is much of that inconsistency which must necessarily arise when we attempt to accommodate facts to an arbitrary and artificial system.

His simple substances are subdivided into confined and unconfined. One reason given for employing these words, is satisfactory—

tisfactory—that they were necessary to express the ideas he meant to convey; namely, ‘that we are able to confine the first set in vessels, but that the second cannot be confined in any vessel.’ But when we come to find the use he makes of these terms, and especially when he adds, that ‘all the terms that have been hitherto employed to characterise these two sets of bodies, convey some hypothesis or other, which, in a work of this kind, it is necessary as much as possible to avoid,’ we find ourselves compelled to object, first, that the application of his terms is inconsistent with fact; and, secondly, that other terms have been already employed which conveyed no hypothesis. It appears to us, that whatever can be excluded, can also be confined; and whatever can be impeded in its progress, is not absolutely unconfineable. The bodies which he calls unconfineable are, light, caloric, electricity, and magnetism. The two last are not treated of in this work. With regard to caloric, the difficulty with which it permeates certain bodies is well known. Clothing is used to confine the warmth of the body; our furnaces are constructed of bad conductors, to prevent the dissipation of the heat; and caloric may be absolutely confined in a vessel of ice, as long as the vessel itself will last. Light is still more confineable. Every room is furnished with shutters to exclude it, and the dark-lantern was contrived to confine it. The circumstance of these bodies possessing no determinable gravity, or being imponderable, which has been already employed to characterise them, is the simple enunciation of a fact, and not liable to similar objections. Dr Thomson’s confineable bodies are subdivided into oxygen, simple combustibles, and simple intombustibles.

The compounds are divided into primary and secondary. The former consist of two or more simple bodies united together, and the latter of two or more compounds. In this arrangement, there is no place allotted for the combinations of compounds with simple bodies. But besides this omission, the division of compounds into primary and secondary in the present state of the science, must be entirely arbitrary or hypothetical. It is not only exposed to the general objection arising from our total ignorance of what bodies are really simple; but many of our author’s primary compounds are, in fact, only known to us in a state of farther composition. Almost all the acids, as objects of our senses, are compounds of acid and water; and many of them, independently of this, are secondary compounds in the strict sense of the word. But, waving as frivolous this objection, which applies to all substances composed of two ingredients which combine in more proportions than one, we are completely ignorant of the nature of the combinations formed by the union of three or more simple substances. We do not know whether
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the immense variety of these are primary compounds, resulting from various proportions of A, B, C, or whether A first unites with B, and then forms a secondary compound with C. Indeed, according to the opinions which Dr Thomson afterwards advances when treating of affinity, there can be no secondary compounds.

In his subdivisions of the primary compounds, Dr Thomson entirely renounces his general principles, and arranges them under the five heads of alkalis, earths, oxides, acids, and compound combustibles—natural classes which have been adopted by all preceding systematic writers. In thus deviating from his own peculiar principles, Dr Thomson is certainly inconsistent; nor are we satisfied with his reasons for being so. These are stated in a preliminary note, in which he gives us a sketch of the arrangement he might have followed; and adds, "but in the present imperfect state of the science, the advantages attending this arrangement would not compensate for the violence of the changes which it would introduce. It would oblige us to classify substances together, which have always been considered as distinct, and to separate many bodies which have hitherto been always grouped together. Besides, we would be forced to omit a number of substances which are still undercompounded, and which are not the less important, because they cannot with propriety be introduced among the simple substances." The first argument, we confess, we did not expect from our author, who on so many occasions calls in question opinions the most universally received, and advances others so contradictory to all former observation, that he is in greater danger of being accused of temerity, and affectation of singularity, than of being blamed for blindly following established authorities, or regarding the prejudices of others. The second argument militates directly against the whole system. For what are we to think of an arrangement, in which a number of important bodies cannot with propriety be classed among the simple substances, and yet are positively excluded from any place among the compounds? We are the more astonished at this reason being given by our author for not following up the principles of his arrangement, as the objection might have been easily removed, and, indeed, in strict conformity to the philosophy of arrangement, ought to have been removed, by adopting the same characters for distinguishing the orders of the compounds with those employed for the simple substances. Compound supporters, combustibles, and incombustibles, would have comprehended every compound body. Under the head of secondary compounds, are included some commonly received and natural families; but the classification is exceedingly defective.

The third book of the first part treats of Affinity.

The second part of this great work contains the chemical examination of nature ; a subject certainly most intimately connected with the science of chemistry, but so far distinct from it, as not to be a necessary part of an elementary treatise, which ought to contain a complete view of the principles of the science, totally independent of its application to any purpose whatever.

We have been thus particular in our account of the arrangement of this work, because so much superiority has been ascribed to it by its author, and, in our opinion, without sufficient reason. It is every where inconsistent with its own principles ; it is incomplete ; it sometimes classes together bodies which have little analogy ; but more frequently divides and subdivides the account of a connected subject into minute portions, which are scattered through very distant parts of the work. If it had been rendered totally independent of hypothesis, and completed on the same general principles, it might have afforded a very good tabular view of the science ; but, as the outline of a detailed system, or as the text-book of a lecturer, it seems to be by no means preferable to those in common use.

It now remains to examine the execution of the work. In doing this, it will only be possible to notice such parts as appear particularly interesting, more especially those in which an author, of so great reputation, has committed errors, which might mislead readers less disposed to question his infallibility than we are. The definition of Chemistry is as unintelligible as abstract definitions of science usually are. It is said to be ' that science which treats of those events or changes which are not *accompanied* by sensible motions.' Dr Thomson may probably consider it as an instance of vulgar prejudice ; but we must confess that we have always considered the bursting of a bomb-shell and the elevation of the piston of a steam-engine as sensible motions. The definition is also particularly defective, in taking no notice of the most indispensable condition of chemical action, namely, the reciprocal action of at least two kinds of matter, and the change of properties occasioned by it.

After mentioning concisely the different epochs in the history of chemistry, Dr Thomson enters upon his account of the simple bodies. The general manner in which he treats each of these, is, first to tell how it is procured, then to mention its physical properties, and, lastly, to detail its mode of action upon those other bodies which have been already described. The account of oxygen is necessarily very brief, as not one of its chemical properties can be explained, without supposing some previous chemical knowledge. This inconvenience is not peculiar to Dr Thomson's arrangement, and indeed cannot easily be avoided.

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But it would surely have been better to have commenced with a class of tangible bodies, than to have plunged his readers, in the very first page, into all the intricacies of the description of a pneumatic apparatus, and to have perplexed them with different kinds of gases, before they can be supposed to have formed any conception of air being a body possessing chemical properties, or indeed to have any conception of chemical properties at all. This section concludes with an explanation of affinity; which shews, in the first place, that Dr Thomson cannot proceed a single step, without explaining the general doctrines of chemistry; and, secondly, how few facts are sufficient to make them intelligible even to beginners.

The second chapter treats of the simple combustibles; and, first of sulphur, which gives Dr Thomson an opportunity of briefly explaining the theories of combustion proposed by Stahl and Lavoisier. The other sections treat of phosphorus, carbon, and hydrogen. Carbon is here synonymous with diamond; of course, Lavoisier's carbon becomes carbonous oxide, or charcoal. But, throughout the whole work, Dr Thomson has neglected to attend to this distinction; and consequently, in the very next chapter, we are presented with a pretty full account of the carburetted hydrogen gases, chiefly taken from the experiments of Mr Cruickshank; although we think that neither their ingenious contriver nor Dr Thomson has drawn from them the conclusions they warranted. For example, in the third experiment, 16 grains of carburetted hydrogen were detonated with 40 of oxygen; the products were 36 grains of carbonic acid gas, and 20 of water. Now, 36 grains of carbonic acid gas are composed of 29.56 oxygen, and 6.44 carbon; and 20 of water of 17.12 oxygen, and 2.88 hydrogen. From the total quantity of oxygen in the product, 46.68, deduct the 40 added, and we have 6.68 oxygen, 2.88 hydrogen, and 6.44 carbon, as the elementary constituents of the 16 grains of carburetted hydrogen.

The following table exhibits a view of the constituents of all the species calculated in this way, and as given by Dr Thomson.

	Oxygen.	Carbon.	Hydrogen.	Water.	
Carb. hyd: from stag- nant water, &c.	35.54 +	46.40 +	18.06		
		52.35 +	9.60 +	38.05	Dr T.
From ether.	35.02 +	45.15 +	19.83		
		45 +	15 +	40	Dr T.
From alcohol	41.76 +	40.23 +	16.01		
		44.1 +	11.8 +	44.1	Dr T.
From wet charcoal . . .	56.77 +	23.43 +	17.80		
		28 +	9 +	63	Dr T.
					These

These differences arise from two causes. Mr Cruickshank did not calculate the constituents of the carbonic acid produced according to its analysis by Morveau; and he supposed that the whole water produced existed in the gas in a state of solution. But it is highly improbable that any gas is capable of dissolving its own weight of water; and as the carbonic acid gas produced must be saturated with vapour, it is, on the contrary, probable, that the whole water precipitated was formed at the moment of decomposition. We therefore think ourselves warranted to conclude, that these gases are not carburetted hydrogen, holding their own weight of water in solution, but that they are hydro-carbonous oxides, and therefore should be referred to a different place in Dr Thomson's arrangement from that which is now assigned them.

The chapter on Combustibles is concluded, as indeed all the chapters are, with some general reflections. The next chapter treats of the Simple Incombustibles, in which the association of azote and muriatic acid as analogous bodies, is the only thing remarkable. An account of the metals concludes the simple combustible bodies.

The second division of the simple bodies comprehends those which Dr Thomson has denominated *unconfined*. In this work, he only treats of light and caloric; but we are happy to learn, that an author so capable of doing justice to the subject proposes, to consider electricity in a separate work. The chapter on Light is exceedingly well written. That on Caloric, is perhaps the most remarkable in the whole work, from the very curious speculations which it contains.

Caloric passes through some bodies with the velocity of light, and through others extremely slowly. Its motion in the first case in which it is said to be transmitted, is explained by supposing the particles of caloric to repel each other; but the explanation of its second kind of motion is not so easy. It has hitherto been considered as the operation of a positive force, which has been called the conducting power; and bodies were named good or bad conductors, in proportion as caloric moved through them with greater or less facility. Dr Thomson has, however, advanced an hypothesis directly the reverse of this; for, observing that caloric is transmitted through some bodies with immense velocity, he has seen the necessity of accounting for the retardation of its progress when it enters conductors. This he ascribes to an attraction or affinity existing between the particles of caloric and those of the conductors, by which the caloric is entangled and detained; so that bodies which were called bad conductors, are in fact good retarders; and the con-

ducting power is a mere nonentity. This opinion might have appeared extremely ingenious to a chemist ignorant of the principles of mechanical science. But surely, if Dr Thomson, who so often makes use of algebraic expressions to render unintelligible to many of his readers what, in common language, could have been mistaken by no one, had allowed himself time for reflection, he never would have committed an error which has betrayed him into so many inconsistencies. He has himself proved that affinity is capable of accounting for the motion of caloric through conductors; it cannot therefore retard the motion which caloric is supposed to derive from its repulsive force, unless it acts in an opposite direction: but in the case of conducting bodies, the affinity always acts in the same direction with the repulsive force; and, instead of retarding the progress of caloric, it ought therefore to accelerate it. But some bodies conduct caloric better than others; and Dr Thomson thinks it 'probable that their affinity is in all cases in the inverse ratio of their conducting power.' The originality of this opinion is truly singular; for no common mind would have conceived that an effect could be *inversely* as its cause. Bodies also differ in the distance to which they are capable of conducting caloric; and this difference, Dr Thomson tells us, 'is always proportional to the temperature to which that body can be raised before it changes its state.' The reasoning upon which this opinion is hazarded, is perfectly inconclusive; for it proceeds on the supposition, not only that the decreasing series of affinities for additional doses of caloric, is the same in all bodies, but also that the conducting power depends *entirely* on affinity. Now, the first supposition is altogether arbitrary, and the second absolutely erroneous. Dr Thomson's general law is equally contradicted by experiment; for lead, tin, and the other fusible metals, conduct caloric much farther than glass; and that most refractory substance, pure clay, cannot be made, by any intensity of heat, to conduct caloric farther than the fusible metals.

All solids *conduct* caloric; but fluids also *carry* it. Count Rumford was the first who paid particular attention to this subject; and endeavoured to prove, by the most ingenious experiments, that fluids only carry caloric, and never conduct it. This opinion of the Count, however, is now completely disproved, especially by the experiments of Mr Murray. On this subject, Dr Thomson has entered at more than usual length, and has divided, between himself and Mr Dalton, the merit of having been the first who, by various experiments, rendered the Count's opinion improbable; although it is inconceivable that he should be ignorant of being anticipated by Dr Hope, whose ingenious

genious experiments on the same subject were publicly exhibited in his lectures.

The tables of the conducting power of different bodies are extremely imperfect, and are constructed upon no uniform principle. For example, M. Meyer's table is given, without any explanation, immediately after Dr Ingenhouz's; although the experiments of the latter showed the comparative *length* of wax-coating, which cylinders of different metals melted when their extremities were plunged in boiling water, and, those of the former, the *times* which equal spheres of wood took to cool the same number of degrees, from which the conducting powers were calculated, on the hypothetical supposition that they were inversely as the times of cooling. Dr Thomson has also determined the conducting power of some fluids from his own experiments; but his statements can be of no use, until we know the *data* on which they are founded. He has, however, erroneously calculated the affinity of these bodies for caloric, from these observations on their powers of conducting it.

The next section is on the Equal Distribution of Temperature. Some bodies cool much more quickly than others; and Dr Thomson tells us, 'that, in general, other things being the same, the rate of cooling may be considered as nearly inversely as the conducting power of fluids.' But he before attempted to prove, that the affinity was inversely as the conducting power; so that the rate of cooling should be *directly* as the affinity, or, in other words, those bodies, which have the strongest affinity for caloric, should part with it most readily! The equilibrium of temperature is principally produced by the repulsive force of the particles of caloric, which always tends to separate them, until it be counterbalanced by an equal pressure in the opposite direction. That affinity has also some share in this process, seems to be proved, by the rate of cooling being slower *in vacuo* than in air. But if the effects of this cause were very considerable, bodies should heat quickly and cool slowly, in proportion to their affinity, which, as far as we know, is not the case.

The next section treats of the Effects of Heat, the first of which, Expansion, is well explained according to the original and interesting ideas of Mr Dalton. In his observations on the caloric of fluidity, we meet with another instance of our author's rashness in drawing general conclusions. In all Dr Irvine's experiments on this subject, he sees 'this rule to hold, that the caloric of fluidity increases with the temperature at which liquidity takes place. Dr Thomson has evidently been induced to draw this conclusion, by imagining that Dr Irvine's numbers expressed the caloric of fluidity of the substances which he examined;

mined; whereas they only express the number of degrees by which the temperature of these bodies respectively would have been raised by the quantity of heat absorbed during their liquefaction. For example, during the liquefaction of ice, as much caloric is absorbed as would have increased its temperature 140° ; and during that of tin, as much as would have increased its temperature 500° ; but the specific caloric of ice is to that of tin as 9000 to 661; therefore, the caloric which is absorbed during the melting of tin, would only have increased the temperature of ice 36.72° , while that absorbed by ice would have increased the temperature of tin 1906° ; whence it follows, that the caloric of fluidity of ice is 3.81 times as much as that of tin; or, taking that of ice as a standard, as 1 to 0.262, and not at all proportionate to their melting point.

The next subject treated of is the Capacity for Heat, or specific caloric, of bodies; on which our author, as usual, attempts to reason profoundly, and to point out some great general law which has escaped the observation of all former philosophers. Unfortunately, however, his whole reasoning is built upon erroneous data; and his law is inconsistent with fact. The experiment, by means of which he explains what is meant by specific caloric, he has most unaccountably mistated; for he tells us, that the caloric which raises the temperature of water 1° , will raise that of the same weight of mercury 3.16° . Now, Crawford tells us, that the caloric which heats water 1° , heats mercury no less than 25° . At first, we thought Dr Thomson had fallen into this important error, by inadvertently substituting equal weights for equal bulks: But even this will not answer; for the caloric which heats water 1° , heats an equal bulk of mercury only 1.5° . From whatever cause this misstatement may have arisen, it certainly cannot be ascribed to an error of the press; for it is the basis of a great deal of the succeeding reasoning.

Because scarcely any two metals, when converted into oxides, combine with precisely the same quantity of oxygen, Dr Thomson somehow concludes (vol. I. p. 394.), that the difference of specific caloric in bodies must therefore depend upon the affinity which exists between bodies and caloric; and thinks it probable, that the specific caloric of bodies is always proportional to their affinity for caloric, and inversely as their conducting power. This conclusion our author esteems of considerable importance, not only because it simplifies the theory of the combinations of caloric with bodies, but because it enables us to determine the conducting power of bodies from their specific caloric, or the contrary. He is, however, sufficiently modest to acknowledge that a set of experiments would be necessary to establish it completely. But,

in those substances which he has examined, he finds the difference between the conducting power, as ascertained by experiment and by theory, less than could be imagined. In proof of which, he presents us with the following table.

Bodies.	Specific Caloric	Conducting Power		Difference.
		by Theory.	by Experiment.	
Water	1.	1.	1.	0
Mercury	0.31	3.22	4.600	+ 1.38
Linseed oil	0.9403	1.06	1.085	+ 0.02

A more erroneous table was perhaps never presented to the public. Of the three substances which it contains, the first is the only one whose corresponding numbers are right. Of the other eight numbers, seven are wrong :—one, we are persuaded, in consequence of a typographical error ; four from being calculated on erroneous *data* ; and the last two, the most important in the whole table, from mistatement. The specific caloric of mercury is set down as ten times greater than it should be ; while, in the case of linseed oil, we actually find its specific gravity substituted instead of its caloric.* When these inexcusable errors are corrected, Dr Thomson will have little reason to boast of the coincidence between his theoretical and experimental estimation of conducting powers.

Bodies.	Specific Caloric.	Conducting Power.		Difference.
		by Theory	by Experiment	
Water	1.	1.	1.	0
Mercury	0.031	32.26	4.800	—27.49
Linseed oil	0.528	1.894	1.085	— .809

In the general table of specific calorics, there are many errors not merely typographical, such as the remarkable one of mercury, but arising from Dr Thomson inserting the *mean* of the observations of different experimenters, made in very different ways, instead of selecting that which appeared to be derived from the justest principles and most accurate experiments.

In treating of the absolute quantity of caloric in bodies, Dr Thomson examines, and endeavours to refute, the hypothesis of Dr Irvine and of Mr Dalton. The futility of his objections to the former, was so completely exposed by Mr Irvine in Nicholson's Journal, Vol. v. p. 25, that we are astonished to see them

* This has probably happened in consequence of Dr Thomson following his own directions of inspecting his general table for the specific caloric, and stumbling upon the wrong column.

retain their place in this new edition; and his observations on the latter are equally inconclusive.

On the subject of Cold, Dr Thomson quotes Pictet's celebrated experiment of its apparent radiation, as the only fact which gives any countenance to the opinion that cold is a body. But although Prevost's explanation of this phenomenon is, as Dr Thomson justly observes, unsatisfactory, we see nothing in it but an example of the radiation of caloric. If we had room in this place for such a discussion, we think it would not be difficult to show, from what is now established as to the radiation and reflection of heat, that the sinking of the thermometer in M. Pictet's experiment, is to be imputed entirely to the subtraction of caloric occasioned by the introduction of a cold body; and that, in consequence of the intercepting and reflecting powers of the mirrors, this caloric is drawn in larger quantities from the focus where the thermometer is placed, than from any other point in the circumference. The heat which flows into the cold body is radiated in part from the surface of the nearest mirror, and the heat thus drawn from its surface is supplied again by parallel rays reflected from the surface of the opposite one, the whole of which will be found, from the angle of their reflection, to proceed from that focal point in which the thermometer is situated. There is a greater drain upon the caloric of that focus, therefore, than upon any other point in the circumference; and its temperature is lowered proportionally. This explanation, perhaps, is too concise to be satisfactory; but we are persuaded, that all the facts may be accounted for by the radiation of caloric, and that the apparatus merely determines the point from which the radiation is to begin. The curious fact discovered by Mr Dalton, that the expansion of water is the same for any number of degrees above or below 42.5, is a much stronger argument for believing that cold is a body, and, if the same law obtained in all other bodies, would be almost unanswerable.

The sources of caloric form the next subject of consideration. Of these combustion is treated in a masterly manner. In the history of its theory, the opinions of others are fairly and candidly stated; while in the account of that hypothesis which is adopted by our author, he allows their full share of merit to the German philosophers who advanced it, and states his own opinions, which are very ingenious, with a degree of modesty and philosophical doubt which are extremely honourable to him.

The heat produced by percussion, is ascribed entirely to condensation. This unquestionably is a source of heat, but appears totally insufficient to account for the great increase of temperature

ture produced by percussion. Iron is easily heated to redness by hammering; yet it only suffers a condensation of $\frac{1}{11}$. Air, condensed to $\frac{1}{4}$, scarcely raises the most delicate thermometer a few degrees. Mr Dalton shews indeed, by calculation, that the real increase of temperature is 50° ; but this would be very trifling in proportion to the caloric given out by hammering iron, if we were to estimate what is wasted during the operation. The brittleness of iron hammered to redness, was ascribed by Dr Black to the deficiency of the caloric thus expressed from it; and upon this hint, Dr Thomson, filled with the philosophic spirit of generalization, at once perceives, that 'brittleness seems in most cases owing to the absence of the usual quantity of caloric;' and refers, for the illustration of his opinion, to the phenomena of unannealed glass. But he has not only failed altogether in proving that glass, cooled quickly, contains at the same temperature less caloric than glass cooled slowly, but, in a subsequent part of his work, he has, with more truth, ascribed the brittleness in the former case to its unequal contraction.

It is undoubtedly true, that water constitutes a part of almost all mixtures in which a change of temperature takes place; but our author certainly goes much too far in stating it to be essential; for, besides the mixture of gases which he mentions as the only apparent exception to this rule, there is an extrication of heat and light when sulphur acts upon the metals, and probably in many other instances. Water, indeed, is no more essential to the production of heat from mixture, than it is to chemical action in general.

Having concluded the subject of caloric, our author subjoins some observations on simple bodies in general, which are only remarkable for the ingenuity with which he moulds nature to suit his particular opinions, by first limiting the simple substances to those concerned in combustion, and then sagaciously observing, that oxygen is capable of uniting with all simple confinable bodies.

We are now come to our author's Compound Substances; but, from the very great extent of the work before us, and the immense variety of subjects which it embraces, it would far exceed our limits to notice the whole of these in the manner they deserve; and as their arrangement has been already pretty fully explained, we shall confine ourselves to a few cursory observations. In justice to our author, however, we must not omit to mention, that they will principally regard his own opinions, when they appear to us erroneous or doubtful. Whatever we pass over in silence, is at least good; often excellent. In the account of the composition of water, some errors have crept into his calculation, which

differs from the statement given under hydrogen. As an accurate knowledge of the constituents of water is of great importance in analysis, and as the calculations have not been revised since the real constituents of carbonic acid have been discovered, we have corrected them from the original *data*. The quantity of gases employed were,

Hydrogen	-	25980.563	} French cubic inches.
Oxygen	-	13475.198	
Atmospheric air	-	15.	

The products of the combustion were,

Azote	-	467	} Cubic inches.
Carbonic acid	-	39	
Oxygen	-	465	
Hydrogen	-	16	

Water - 7245 French grains.

The carbonic acid was produced from a small quantity of carbon dissolved in the hydrogen. It weighed 26.9 grains, and contained 22.09 oxygen, and 4.81 carbon. From the hydrogen employed, the 16 inches in the residuum must be deducted; and the remainder, 25964.563, multiplied by its weight per inch 0.040452, gives 1050.32 grains; from which, the 4.81 of carbon, being deducted, leaves 1045.51 grains as the real weight of hydrogen consumed. But the oxygen contained 404.256 cubic inches of azote mixed with it; which, with 465 of oxygen found in the residuum, being deducted, and the 4 contained in the 15. atmospheric air being added, gives 12609.942 of oxygen. This, multiplied by its weight per inch 0.493986, gives 6229.33 grains; from which the 22.09 expended in the formation of carbonic acid, being deducted, leaves 6207.24 oxygen. There were therefore consumed.

	<i>French Grains.</i>	<i>Troy Grains.</i>	<i>Decimals.</i>
Hydrogen	1045.51 =	857.796 =	14.42
Oxygen	6207.24 =	5092.420 =	85.58
	<hr/> 7252.75	<hr/> 5950.156	<hr/> 100

which is but 7.75 French grains, or 6.36 Troy, more than the water obtained.

That important class of bodies, the Acids, are divided by our author into products, supporters, and combustible acids; a division which is of some use in our general views of the subject, but, on the other hand, would become inconvenient if strictly followed in the detail. To this chapter some observations on the acid principle are prefixed, in which our author endeavours to shew that oxygen is not an essential constituent of acids. But we think the

the matter still doubtful; for, besides the three undecomposed acids, the only others in which Dr Thomson has denied the presence of oxygen, are, the Prussic acid and sulphureted hydrogen. Now, the former certainly contains oxygen; for if Vauquelin's experiments were not of themselves sufficient to prove it, an oxide of carbon, charcoal, is admitted to be one of its constituents; and our acquaintance with the composition of the latter is certainly not enough to allow us to assert that it contains no oxygen.*

The class of compound combustibles is exceedingly deficient. It ought to have contained the greater part of animal and vegetable substances; and our author's reasons for excluding them are most unsatisfactory—'They are too little known, and their utility as chemical instruments is too inconsiderable!' A system of chemistry ought to be complete in its arrangement, and totally independent of any essays on meteorology, mineralogy, or physiology. These form, it is true, beautiful applications of the science, and they cannot be understood without it; but they have no more pretensions, than the chemical arts and other useful applications. to be forced in as essential parts of a system of chemistry. To the chemist, each individual substance is the same, from whatever kingdom of nature it may be derived, and to whatever purpose it may be applicable.

Our author gives an erroneous idea of the composition of fixed oil, in asserting it to consist of carbon and hydrogen only. It is a compound oxide. Lavoisier's analysis, by burning oil with oxygen gas, gives the following results.

<i>Employed.</i>		<i>Products.</i>	
Olive oil	15.79	Carbonic acid	44.50
Oxygen	50.86	Water	22.15
<hr/>		<hr/>	
66.65		66.65	

Now the elementary constituents of these are,

<i>Carbon.</i>	<i>Oxygen.</i>	<i>Hydrogen.</i>	
7.9566,	36.5434,	—	in the acid.
	18.95597,	3.19403	in the water.

55.49937

From which — 50.86 employed in the combustion

being deducted, 4.63937 are left, which, with the carbon

* In the Appendix we find our opinion confirmed by Dr Thomson himself, who, speaking of an oxide of sulphur he has discovered con-

bon and hydrogen, exactly amount to the 15.79 grains of oil burnt. Therefore the constituents of oil are,

Carbon	50.39	And not 79.	Carbon.
Hydrogen	20.225	21.	Hydrogen
Oxygen	29.385		

100 of Dr Thomson.

100

The analysis given by our author, is that of Lavoisier; but Lavoisier was unacquainted with pure carbon, and gave that designation to charcoal, which is an oxide of carbon. Therefore, in speaking of Lavoisier's carbon, Dr Thomson should have always distinguished it by the appellation of charcoal, and in all analyses have remembered that it was an oxide, which he has seldom if ever done. His negligence in this respect is the more inexcusable, as, by using one term to express two very different substances, he has often both misled himself, and rendered his statements ambiguous to others. These observations apply still more strongly to his account of the composition of wax and alcohol, because he has founded on the presence of oxygen in these substances, as demonstrated by various experiments, to prove that the experiments of Lavoisier, from which that philosopher concluded that the former consisted of carbon and hydrogen, and the latter of carbon, hydrogen, and water, are not to be depended on. Unexceptionable they are not; but, for the present state of the science, they are remarkably accurate; and until we have better data to go upon, we must consider them highly valuable. When the calculation from them is corrected, their composition appears to be

	Wax.	Alcohol.
Carbon	53.12	18.2
Hydrogen	16.91	16.76
Oxygen	29.97	65.04
	100	100

Whether any of the hydrogen and oxygen existed combined in the state of water, we have no means of ascertaining.

The Salts are the most important class of the secondary compounds. The common distribution of these into the two great families of the metalline, and earthy and alkaline salts, is properly retained; the genera of the latter being distinguished by the acid, and of the former by the metal they contain. The alkaline and

taining 6.2 per cent. oxygen, says, 'I have since found reason to believe that it is this oxide, and not pure sulphur, which exists in sulphureted hydrogen gas, and probably in all the hydro-sulphurets.'

and earthy salts are moreover divided by Dr Thomson into the two orders of combustibile and incombustibile; but it would have been more consistent with other parts of his arrangement, to have formed a third order of the detonating or supporting salts, which are at present classed with the incombustibile. We may also mention, that the ammoniacal salts are all combustibile, and therefore, in some instances, do not properly belong to the same order with the other species of the genera.

The genera of the metalline salts are not easily classed in different orders; but the species of each genus form several natural groupes. Our author has divided them into detonating, incombustibile, combustibile, metallic, and triple salts. This arrangement is deficient with regard to unity; for it is formed upon two principles, which interfere with each other; the three first divisions being taken from the properties, and the two last from the composition of the salts. The two last indeed appear to be altogether unnecessary; for all the metallic and triple salts are either detonating, incombustibile, or combustibile. They form, however, very natural subdivisions of these groupes. The salts are by far too numerous for us to enter into any examination of our author's account of them. We may only mention, that he seems to have been rather hasty, notwithstanding Chenevix's excellent experiments, in annihilating the genus of oxymuriats; for it is certain, that many of them possess the property of bleaching, which, in all probability, depends on their containing oxymuriatic acid, since neither the muriatic, nor hyper-oxymuriatic acid, destroys vegetable colours. The hydro-sulphurets and soaps are the only other secondary compounds noticed, although there are several other classes of them.

Having finished his account of the secondary compounds, Dr Thomson proceeds, as usual, to draw some general inferences from the facts he has detailed; and, in the present instances, he seems extremely unfortunate; for not one of the four he has stated is admissible: 1. He has discovered "a singular and remarkable correspondence between secondary compounds and simple bodies; for neither of them possess that activity, that violent action upon other bodies, which distinguish primary compounds." This is not simply a mistake; it is a mistatement. Our author selects such substances, and places them in such circumstances, as suit his purpose, although numerous facts exist in obvious and direct opposition to his general conclusion. Does he consider combustion as a proof of the inactivity of oxygen, and of the simple combustibles? or do the oxymuriats and metalline salts appear to him examples of the inertness of secondary compounds? Nay, he himself has quoted *potass* as the extreme example of the activity of primary compounds; but until he proves *potass* to be

a compound body, it completely disproves his conclusion. 2. 'No secondary compound is gaseous.' What is etherized nitrous gas? 3. 'None of them are combustible.' Spirit varnish is not combustible! The detonating salts are not secondary compounds!! 4. 'The *secondary* compounds have been investigated with more precision than any other class of bodies; from them almost all our notions of affinity have been derived; it is to them we have always recourse to illustrate these notions,' &c. &c. But of the *primary* compounds we were also told (vol. II. p. 263.), that *they* were the 'class of bodies which have been the longest known, which have been most accurately studied, and which constitute, without doubt, the most important instruments of chemistry;' and, in the preface, it was mentioned as one of the characteristic merits of our author's arrangement, that it begins with those parts which have been most successfully investigated. But this kind of inconsistency is of very little consequence, if it at all ~~promote~~ ^{promote} our author's view of exciting the attention of his readers, by exaggerating the importance of every subject which successively engages them.

Having collected the immense mass of facts contained in the two first books, our author now proceeds to treat, in the third, of those general laws by which the whole are regulated. Our imperfect knowledge of these, is ascribed by him partly to the unaccountable negligence of the greater number of chemists, 'who have been more anxious to ascertain particular facts, than to investigate general principles, and who have often seemed to look upon general principles as altogether foreign to their science.' There may be some truth in this observation; but, such an opinion, coming from so high an authority, may be attended with very bad consequences, in misleading young men to waste their time and labour on idle speculations, and to despise the less brilliant, but more substantial reputation, of increasing our store of facts. For our part, we are persuaded that even Dr Thomson himself, notwithstanding the extent of his knowledge, and the universality of his talents, has done infinitely more service to chemistry by his industry as a compiler, and his assiduity in observing the results of mixtures, undirected by general views, than by all his attempts at generalization.

The first chapter of this book is said to treat of Affinity in general. Many chemists dislike the term *affinity* altogether; but with Dr Robison we think it is of use, as 'it distinguishes very compendiously the phenomena of combination (which are the chief objects of chemistry) from the phenomena of cohesion, adhesion, capillary attraction,' &c. In this limited sense alone, as synonymous with chemical attraction, and in contradistinction to cohesion and the other species of attraction, has it been hitherto employed.

employed. By Dr Thomson, however, it is arbitrarily, and, we think, injudiciously extended to include, as a generic term, every species of contiguous attraction, and to comprehend those very forces from which it was invented—to discriminate that attraction which is properly chemical. The necessary consequence of this innovation is not only embarrassment to Dr Thomson's readers, but real ambiguity and confusion in his writings, where it is sometimes employed in the limited, and sometimes in the extended signification. Adhesion and cohesion are classed together, as 'homogeneous affinities,' while chemical attraction is distinguished by the phrase 'heterogeneous affinity.' But these innovations are at variance with fact; for heterogeneous bodies adhere, and, if we mistake not, cohere also, as in some compound stones. Since, therefore, heterogeneous bodies attract each other, independently of combination, heterogeneous affinity is an inaccurate expression for chemical attraction.

Contiguous attraction is said by our author to resemble sensible attraction, in increasing with the mass of the attracting bodies, and diminishing as the distance increases. Of this, however, he is able to adduce no proof; and the resemblance must be therefore considered as merely hypothetical. Indeed, he confesses himself unable to determine, whether contiguous, like sensible attraction, decreases in the ratio $\frac{1}{d^2}$, or in a greater ratio; but if it be at all proportionate to distance, it must follow a much greater ratio; for, at a distance greater than contiguity, it becomes altogether insensible, or bears no proportion to the force of gravitation; whereas, whenever it becomes sensible, it is more intense than gravitation. But the most important character of contiguous attraction is, that it varies in intensity in different particles; on which occasion, our author indulges himself in speculating, whether it be one force, or many forces; whether it be owing to the figure of the particles, or whether it be the same with gravitation; and after exerting all his ingenuity, he leaves himself and his readers just as wise as when he began. Cohesion is treated at considerable length, according to the hypothesis of Boscovich; and we are told, that it is deserving of notice, that the cohesive force of simple bodies is greater than that of compounds, except in the case of the metals and elastic fluids—that is, except in 26 cases out of 29! To which list of exceptions he should have added sulphur and phosphorus, which are not so hard as most of the sulphats and phosphats, so that diamond turns out to be the only simple substance which is harder than all its compounds. Haüy's theory of crystallization is very neatly stated; but the influence of the free access of air in promoting crystallization, cannot be explained on the supposition

tion that it carries off caloric; for, upon that supposition, crystallization should take place at the same temperature, whether the air be excluded or admitted.

We now come to the most important chapter in the whole work, that on *Heterogeneous Affinity*. From the arrangement adopted by our author, the expectations of his readers may reasonably be raised to the highest pitch; but we are much afraid that their disappointment will be equally great, not, however, from any inability or negligence on his part, but from the view he has taken of the subject. Instead of being satisfied with ascertaining the general laws of combination by fair induction, he has treated chemistry as a mere branch of mechanical philosophy; he has considered chemical attraction as the same force with adhesion, and as subject to the same laws; and is so completely absorbed in the attraction and repulsion of particles, that he loses all sight of what is peculiar to chemistry, and only notices its laws accidentally in the course of his more general and abstruse speculations. These, we confess, are not uninteresting, and may be acceptable to those who delight in what may be called philosophical intoxication, but appear to us extremely misplaced in an elementary work, which should be adapted to the capacity of all its readers; and, if it ever enter into such speculations, should treat them merely as of secondary importance, and matters of curiosity. Our opinion, indeed, may be the effect of prejudice; for we may be misled by the high authority of our instructors in chemistry and mechanical philosophy, the one of whom thus speaks of the manner in which the other considered this very subject: 'The worthy author of these lectures was always more anxious to communicate what may be called a clear and confident knowledge of the doctrines of pure chemistry, than to lead his pupils into abstruse or refined speculations on the unseen and unknown immediate causes of chemical combination. He considered every such question as rather out of the pale of chemical science; and so it certainly is. Whenever we speculate about the attractions and repulsions of particles, ~~and~~ the immediate agents in effecting the chemical changes, we are no longer chemists, but mechanicians. We are considering questions about local motion, and the mathematical determinations of the effects of moving forces. Not only is the occupation not chemical, but the questions themselves give little addition of chemical knowledge.'

Dr Thomson, however, thinks otherwise; and it is our duty to follow him in his speculations; the first of which is, that he considers it very probable, that there exists a reciprocal affinity between every species of the particles of bodies. But his

his proofs of its existence in those numberless cases where it is commonly denied, are very unsatisfactory. For, the solution of soap in water, and lime in nitric acid, certainly do not prove that oil has any affinity for water, or lime for azote. In this last case, as well as in many others, a substance is found to have a strong affinity for a compound, which, in every circumstance, refuses to unite with either of its constituents; while, on the contrary, there are also numerous examples of substances refusing to unite with a compound, which have a strong affinity for its constituents. But this change of property, which is the strongest character of chemical action, seems to be totally overlooked by our author in all his reasonings about affinity. Bodies are in general believed to differ in the intensity of their affinity for each other; and M. Berthollet has lately shewn, that this is much modified by their comparative masses. But it by no means follows from the nature of affinity, that if a particle A attract B with a force $= x$, that two particles A ought to attract B with a force at least $= y > x$; for B may unite with one particle A, and form a compound C, which has no affinity for a second particle A. The same argument is equally conclusive against the opinion supported by our author—that difference of intensity of affinity is insufficient to account for decomposition, unless some other force, such as elasticity or cohesion, intervene to determine the exclusion of some particular bodies. Indeed, if this opinion be true, when compound bodies unite, the combination does not take place between them as compounds, but amongst the elementary particles of which they are composed; and no such thing as a secondary compound can exist. Saturation is sufficiently well defined—the balancing of affinity with its antagonist forces, cohesion and elasticity. It is owing to this that the freezing point of water is lowered when it holds some bodies in solution. But our author carries his reasoning rather a little too far, when he concludes that a table of the freezing points of different saline solutions would be a pretty accurate indication of the affinity of the different salts for water. On this principle, how will he account for the fact, that sulphuric acid, combined with a certain proportion of water, actually raises its freezing point, but with a larger quantity lowers it considerably? And as the same reasoning ought to apply to vaporization, how comes the boiling point of some saline solutions to be lower than that of water? Neutralization takes place, when bodies unite in such proportions that they mutually destroy or disguise the properties of each other. In this state, our author supposes their combination to be as perfect as possible, and that their affinities are equal, that is, that the affinity of A for B is equal to that of B for A. He

next proceeds to demonstrate, that, in all combinations, there is a *maximum* and *minimum* in the proportions of the constituents, beyond which they can never pass; but he cannot determine whether they are capable of combining in any indefinite proportion between these limits, or only in certain determinate proportions. In the latter case, therefore, with unusual caution he consults experience; and he certainly would have acted more wisely to have done the same in the former case; for his reasoning is founded on principles purely hypothetical, and leads him to conclusions directly contrary to fact—for example, that elastic bodies can only combine with each other in one proportion. Now, azotic gas combines with oxygen gas in four proportions; and the proportion of the carbonates of ammonia are the most unsteady of all the crystallizable salts. We are also told, that all compounds, of which the ingredients combine only in certain determinate proportions, have an elastic fluid for one of the ingredients; yet we have the tartrat and super-tartrat of potass, the sulphurets and super-sulphurets of the metals, &c.

We now come to the consideration of the various methods which have been proposed to express the strength of every affinity in numbers. The first that meets with our author's approbation, is that of Morveau, founded on the supposition that the affinity of bodies for each other is directly as the force necessary to overcome the adhesion of their surfaces. But, besides the impracticability of carrying it into effect, which even the ingenious suggestions of our author will not remove, it is merely hypothetical, and cannot be admitted unless it be found to coincide with fact. But a disk of glass adhered to water with a force of 258 grains, and to a solution of potass, though denser, only with a force of 210; yet water has no chemical action on glass, and a solution of potass has. From a series of hypothetical principles, Berthollet concluded, that the affinities of bodies were inversely as the mass of each body capable of neutralizing the other; and, to bring this conclusion to the test of experience, our author has calculated the affinities of the acids and bases for each other from Kirwan's last table of the salts; from which he concludes, that it is exceedingly probable that the real order of affinities does not deviate far from that given in his tables, derived from these calculations. Now, the best way of ascertaining the probability of such an hypothesis, is to compare it with the facts. Accordingly, this has been very properly done by Dr Thomson; and he finds that the affinity of the bases for the acids follow precisely the inverse order of that given by Bergman. This objection, however, is of little importance; for Bergman trusted to the clumsy mode of experiment, by ascertaining what salts decomposed each other; and

and decomposition is certainly no test of the strength of affinity. The affinities of the acids follow the order which has long been recognized in the metallic salts. It is true, they are apparently different in the salts from which these tables have been calculated: but that, according to Dr Thomson, is of no consequence, as the muriats are all more soluble than sulphats. With regard to the carbonic acid, its affinities as calculated from these tables are inconsistent with fact; but *they* must not be taken into consideration, because the composition of the carbonats is very imperfectly determined. This kind of reasoning, however, we cannot admit. The composition of the carbonats was ascertained by Kirwan as well as that of the other salts, and is equally entitled to our confidence; and although, in consequence of the action of mass, elasticity and cohesion, the order of affinity may be different from that of decomposition, it furnishes no argument to prove that Berthollet's hypothesis is more probable than the directly opposite one of Kirwan, or than any other which may be imagined by any succeeding philosopher. It is, on the contrary, in favour of Kirwan's hypothesis that it in general coincides with the order of decomposition; for the action of mass, cohesion and elasticity, may enable him to explain the few apparent exceptions. But Berthollet, although he were to succeed in the more arduous task of proving that the order of decomposition is in almost every instance wrong, has not advanced one step in establishing the probability of that which he has adopted. Now, besides the affinities of carbonic acid, there are others, derived from his hypothesis, which cannot be accounted for. For example, the affinity of lime to sulphuric acid is stated to be stronger than that of potass or soda, and its affinity to nitrous and to muriatic acid weaker than that of magnesia: the affinity of muriatic acid, again, to soda, is stated to be nearly twice as strong as that of sulphuric acid: which are all contrary to the order of decomposition, and opposed also, in these instances, by the action of cohesion. Berthollet's hypothesis, therefore, appears to us inconsistent with fact. Another way of examining the validity of any hypothesis of this nature, is to carry them as far as they will go, and see to what conclusions they will lead. Now, if the principles of either Kirwan or Berthollet were true, the affinities of bases for all acids, and of acids for all bases, should follow the same ratio; which is also contrary to fact. These speculations, therefore, do not seem to have increased our knowledge of the comparative affinities of bodies; and we must still resort to the humble and tedious method of experiment to ascertain them.

The next subject treated of, is Compound Affinity, concerning which we find nothing very remarkable. It does not appear to us

by any means certain, that saline solutions, which may be mixed without precipitation, combine; for example, that when solutions of sulphat of potass and muriat of soda are mixed, these compound salts do not remain entire, but that a solution is formed, containing sulphuric acid, muriatic acid, potass and lime, uniformly combined; for, upon the same principle, there should be no secondary compounds, and the phenomena of chemistry should be different from what they really are. The effect of the insolubility of salts, as explained by Berthollet, is true to a certain extent; but it is not without exceptions. In the tables of affinity for nitric and muriatic acid, calculated on his own principles, strontian is placed below soda and potass, although the salts of strontian are the most soluble. The last chapter is on Repulsion; and it might have been entirely omitted, without any injury to the book as a system of chemistry. To most of his readers, it will be totally unintelligible, and by many it will be esteemed as a wonderful effort of learning and ingenuity.

Notwithstanding the great length of these observations, a volume and an half still remain to be noticed, containing the second part of the work, entitled the Chemical Examination of Nature. It will not, however, detain us long; as we consider by far the greatest part of what is here collected under this title, as misplaced in a system of chemistry; and the remainder is merely the application of the knowledge contained in the former part, to the examination of nature. The means of analysing the atmosphere, mineral waters, minerals, and animal and vegetable substances into their immediate principles, and the investigation of whatever chemical changes they undergo, belong properly to chemistry, and would have formed a very natural sequel to a general system of the science; while the greater part of the meteorology, mineralogy and physiology belong to other departments.

The account of the atmosphere is in general well executed; but Dr Thomson has committed an error in his calculation of the proportion of weight of its constituents. From his own data, instead of 74 azotic gas and 26 oxygen, the results are 75.12 and 24.88; but he has supposed the relative specific gravity of oxygen gas to that of azotic gas to be as 135:115, whereas they are as 1356.1189: the real results are 75.67 azotic gas, and 24.33 oxygen. Our author differs from Mr Dalton in believing atmospheric air to be a chemical compound. Only one of his arguments, however, appears to us to be relevant, viz. that derived from the experiments by which Humboldt and Morozzo endeavoured to establish a difference of properties between atmospherical air and an artificial mixture of its constituents, though the result was owing to an excess of oxygen in their mixture. In speaking of the comparative merits of the muriatic and nitric acid fumes in destroying contagion,

contagion, Dr Thomson certainly does not speak from experience, when he prefers the former, not only on account of their superior efficacy, but also because the latter are attended with inconvenience, from being almost always contaminated with nitrous gas. To what inconvenience he alludes, we know not; but it is certain that the nitric acid fumes, diffused according to Dr C. Smyth's directions, do not render the removal of the patients during the fumigation at all necessary, which the muriatic gases do.

Mineralogy, we are told, is 'that branch of chemistry which treats of Minerals;' and in conformity with this opinion, Dr Thomson has filled almost a volume of his work with this subject. But Mineralogy is certainly a branch of Natural history, which is as intimately connected with the physical as with the chemical properties of its objects. If Dr Thomson believed himself qualified to write a better system of mineralogy than any of those we possess, it would have been highly acceptable as a separate publication; but we think that, by introducing it in this work, he has unnecessarily increased its expence. In compiling it, our author is principally indebted to Haüy and Brochant. In the arrangement, indeed, he seems to think he possesses considerable merit, though we cannot perceive upon what grounds. The principle is taken from Bergman; and in its application, Dr Thomson deviates from it almost as frequently as he adheres to it. In other systems, minerals have been classed in genera, according to the nature of the earth from which they derive their characteristic properties; and from this characteristic earth the genera have received their names. Dr Thomson classes them in genera according to the proportions of their constituents, and gives them symbolic names, formed by arranging the first letter of every substance which enters in any considerable quantity into their composition, in the order of their proportions. Now, it appears to us, that every argument which Dr Thomson adduces against the common arrangement, applies as forcibly against this, and that it is attended with other insurmountable inconveniences. Before any specimen can be arranged, it must not only be analysed, but its analysis must be perfect; and even if analysis were as easy as it is difficult, it would often oblige us to place different specimens of the same mineral in different parts of the system. To prove the truth of this opinion, we need only examine a few of Dr Thomson's genera. The first is entitled *A*, which, according to his principles, are minerals consisting entirely of alumina. It contains two species; the first, *Diaspore*, contains also 17 water and 3 oxide of iron, and should therefore be designated by the symbol *A W*, if not *A W I*; the second, *Native Alumina*, contains only 45 alumina, 27 water, and 24 sulphat of lime—its symbol is therefore

A W L, or, as Dr Thomson overlooks salts, A W. The second genus is A S. The first species, Corundum, contains the oriental ruby and sapphire, correctly placed here according to M. Chenevix's analysis; but, according to Mr Klaproth's, sapphire belongs to A, of the imperfect corundums; that from China, as well as Emery, belong to A I S, as the quantity of iron exceeds that of silica. The second species, Chrysoberyl, contains 6 of lime and therefore belongs to A S L. The third, the Topaz, is right, as well as the Fibrolite, also numbered the third by mistake, and the fourth Sommit. The third genus is A M. The first species, Spinel Ruby, belongs, by Vauquelin's analysis, to A M C, and by Klaproth's to A S M; and the second, the Ceylanite, to A I M. From these three first genera our readers will be able to judge of the others. In this edition, a chapter is added on compound minerals, translated from Brochant; and the last chapter treats of the analysis of minerals.

The fourth book treats of Vegetables; and the fifth, which concludes the work, of Animals. No part of the work has undergone so many alterations in this edition as the chapter which treats of the ingredients of vegetables. The author's ideas on the importance of this subject seem to have undergone a very great change, and to this change of opinion his readers are indebted for much very valuable information; for, instead of 60 pages, it now occupies 160; although there is very little of it, except what is derived from his own experiments, which was not known to pharmacutists when the former edition was published. But vegetable chemistry has become fashionable, and Dr Thomson has applied to it with very great success, in his experiments on gum, sarcocol, and the bitter principle.

An appendix is added, containing those discoveries of importance which were made during the printing of the work; and we are sorry that we must conclude our analysis, by lamenting that the index is not more copious.

Dr Thomson has, in general, adopted M. Chenevix's nomenclature; but we have occasionally observed deviations inconsistent with it, as tannat and other *ats* for combinations of substances which are not acid. These, however, we believe to be accidental.

Dr Thomson's method of distinguishing the degrees of oxidation in the metallic oxides, by prefixing the first syllable of the Greek ordinal numbers to the word oxide, as prot-oxide, deut-oxide, &c., and the *maximum* of oxidation by per-oxide, we think is an improvement. On the other hand, we trust that our author's example will induce no one to follow him in distinguishing these metalline salts which contain the metal in the state of per-

per-oxide, by prefixing the particle *oxy* to the name of the acid, as that form of expression has already another much more natural meaning. 'Capacity for caloric,' is also used by Dr Thomson to express the quantity of caloric in equal bulks of bodies, although it has hitherto always had a reference to equal weights. Our author seems also to have a very great dislike to superfluous letters, not only in the names of substances, but also in those of the German chemists; but Hermstad, Humbolt, Westrum, &c. will appear to a German eye as awkwardly exotic as Tomson would do to our author's.

The references to authorities with which this work abounds, are extremely valuable; and, in general, Dr Thomson gives a due degree of credit to the discoverers of particular facts; and if, in some instances, through ignorance or inadvertence, the real discoverer is not mentioned, in others his praise almost amounts to flattery. For example, his gratitude to that excellent chemist Mr Hatchett, for having communicated to him his unpublished experiments on resins, has led him to exaggerate their importance to a degree that we conceive must be displeasing to that gentleman's modesty, especially as most of the facts, which Dr Thomson seizes every possible opportunity of announcing as Mr Hatchett's discoveries, were previously known. His general statement is in the following words: 'Hitherto it has been affirmed by all chemists, ancient and modern, that the alkalies do not exert any action on resins: Fourcroy, for instance, in his last work, affirms this in the most positive manner; but the experiments of Mr Hatchett have demonstrated this opinion to be completely erroneous.' And after stating the experiments, he proceeds, 'Nothing can afford a more striking proof, than this, of the necessity of repeating the experiments of our predecessors before we put implicit confidence in their assertions. The well-known fact, that the soap-makers in this country constantly mix rosin with their soap; that it owes its yellow colour, its odour, and its easy solubility in water to this addition, (?) ought to have led chemists to have suspected the solubility of resins in the alkalies. No such consequence, however, was drawn from this notorious fact. In opposition to all this, we shall quote only one modern chemist, Gren, who expressly says that 'the resins also form, with the caustic alkalies, soapy combinations.' Again, 'it has been supposed also,' says Dr Thomson, 'that the acids are incapable of acting upon the resins; Fourcroy is equally positive with regard to this; and Gren speaks of it in such a manner that every reader must conclude that he had tried the effect of nitric acid upon resins. Yet Mr Hatchett has ascertained this opinion likewise to be erroneous, at least as far as nitric acid is concerned,'

concerned.' The following is the manner in which Gren speaks of it: 'Concentrated *nitric acid* acts upon powdered rosin very powerfully, and nitrous gas is evolved; but the running together of the rosin into lumps, makes its complete solution in nitric acid extremely difficult.'

To his predecessors in the laborious task of compilation, Dr Thomson seldom makes any acknowledgment, although we think it would have been but just, to have mentioned in the preface his obligations to them, especially to Fourcroy, from whom he has often borrowed largely. In some instances, an author of this description is quoted for a particular fact, although the whole passage be borrowed from him. A very flagrant example of this kind occurs in vol. IV. p. 129, when Brochant is quoted in such a manner as to make it appear that nothing but the enumeration of Werner's classes is taken from him, whereas the whole chapter, *Of compound minerals*, extending to twenty-five pages, is an abridged translation of Brochant, with the addition of three analyses by Dr Kennedy and M. Klaproth, and one observation by the author.

Upon the whole, notwithstanding the numerous errors which we have discovered, or believe we have discovered, in this work, they are much more than counterbalanced by its general merits. The immense quantity of chemical information which it contains, is highly creditable both to the abilities and the industry of the author; and if, in a future edition, he will restrain a little his propensity to premature generalization, and free his numerical expression from the numberless errors which now render it impossible to trust to any of his calculations with security, we have no doubt that it will continue to maintain its reputation as the best repository of chemical knowledge that has yet been offered to the public.

If any of our readers should be inclined to object, that the general tone of the preceding observations does not accord very harmoniously with this concluding eulogium, or to accuse us of having specified little more than the defects of a work of such unquestionable merit, we would beg leave to remind them, that Dr Thomson is neither humble nor obscure enough to stand in need of recommendation or encouragement from us. The public has already done ample justice to his talents; and he is himself perfectly aware of the extent of his claims on their favour. In this situation, while it is almost unnecessary to proclaim his merits, it becomes of the greatest consequence to point out his mistakes and imperfections. Under the sanction of so great an authority, errors are propagated with a very mischievous rapidity, and the author himself is apt to become presumptuous and precipitate, when no one is to be found who will admonish him of his failures.

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and faults. Notwithstanding the freedom of our remarks, we doubt if any of Dr Thomson's readers have a higher sense than we have of the value of this publication; the perusal of which we very earnestly recommend to every student of chemistry.

ART. X. *Specimens of the Early English Poets: To which is prefixed, An Historical Sketch of the Rise and Progress of the English Poetry and Language.* By George Ellis, Esq. The Third Edition, Corrected. 3 vol. 8vo.

THE first edition of this interesting work appeared in 1790, comprising in one volume many of the most beautiful small poems which had appeared during the sixteenth and seventeenth centuries. The plan was certainly worthy of being enlarged; and accordingly, in the second edition, published about a year ago, and rapidly disposed of, as well as in that which is now before us, it has received such considerable additions, that the work has increased to thrice the original size; and Mr Ellis has established his claim to the character of an original author, as well as to that of a judicious collector and editor of the forgotten poems of antiquity. The first volume contains the preliminary historical sketch of the rise and progress of English poetry and language; the second and third are occupied by those specimens which give name to the whole. We shall endeavour successively to analyse the contents, and examine the merits, of these two divisions of the work.

It is obvious to every one who has studied our language, whether in prose or poetry, that a luminous history of its rise and progress must necessarily involve more curious topics of discussion than a similar work upon any other European language. This opinion has not its source in national partiality, but is dictated by the very peculiar circumstances under which the English language was formed. The other European tongues, such at least as have been adapted to the purposes of literature,* may be divided into two grand classes—those which are derived from the Teutonic, and those which are formed upon the Latin. In the former class, we find the German, the Norse, the Swedish, the Danish, and the Low-Dutch, all of which, in words and construction, are dialects of the Teutonic, and preserve the general character

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* We do not mention the dialects founded on the Celtic and Slavonic languages, because they have not been used in literary composition; nevertheless, the same observation applies to them as to the others; they have each their derivation from a single mother-root, and are not, like the English, a compounded or mingled language.

of their common source, although enriched and improved by terms of art or of science adopted from the learned languages, or from those of other kingdoms of civilized Europe. The second class comprehends the Italian, the Spanish, and the French in all its branches. It is true, the last of these has, in modern times, owing to the number of French writers in every class and upon every subject, departed farther from its original than the two others; but still the ground-work is the Latin; and the more nearly any specimen approaches to it, it may be safely concluded to be the more ancient; for, in truth, we know no other rule for ascertaining the antiquity of any particular piece in the *Romanz* language, than by its greater or slighter resemblance to the speech of the ancient Romans, from which it derives its name. Thus every language of civilized Europe is formed of a uniform pattern and texture, either upon the Teutonic, or upon the Latin. But the same chance which has peopled Britain with such a variety of tribes and nations, that we are at a loss to conceive how they should have met upon the same spot—and that, comparatively, a small one—has decreed that the language of Locke and of Shakespeare should claim no peculiar affinity to either of these grand sources of European speech; and that if, on the one hand, its conformation and construction be founded on a dialect of the Teutonic, the greater number of its vocables should, on the other, be derived from the *Romanz*, or corrupted Latin of the Normans. It is interesting to observe how long these languages, uncongenial in themselves, and derived from sources widely different, continued to exist separately, and to be spoken respectively by the Anglo-Norman conquerors and the vanquished Anglo-Saxons. It is still more interesting to observe how, after having long flowed each in its separate channel, they at length united and formed a middle dialect, which, though employed at first for the mere purpose of convenience and mutual intercourse betwixt the two nations, at length superseded the individual speech of both, and became the apt record of poetry and of philosophy.

The history of poetry is intimately connected with that of language. Authors in the infancy of composition, like Pope in that of life, may be said to 'lisp in numbers.' History, religion, morality, whatever tends to agitate or to soothe the passions, is, during the earlier stages of society, celebrated in verse. This may be partly owing to the ease with which poetry is retained upon the memory, in those ruder ages, when written monuments, if they at all exist, are not calculated to promote general information; and it may be partly owing to that innate love of song, and sensibility to the charms of flowing numbers, which is distinguishable even among the most savage people. But, what-
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ever be the cause, the effect is most certain ; the early works of all nations have been written in verse, and the history of their poetry is the history of the language itself. It therefore seems surprising, that, where the subject is interesting in a peculiar as well as in a general point of view, a distinct and connected history of our poetry, and of the language in which it is written, should so long have been a *desideratum* in English literature ; and the wonder becomes greater when we recollect, that an attempt to supply the deficiency was long since made by a person who seemed to unite every quality necessary for the task.

The late Mr Warton, with a poetical enthusiasm which converted toil into pleasure, and gilded, to himself and his readers, the dreary subjects of antiquarian lore, and with a capacity of labour apparently inconsistent with his more brilliant powers, has produced a work of great size, and, partially speaking, of great interest, from the perusal of which we rise, our fancy delighted with beautiful imagery, and with the happy analysis of ancient tale and song, but certainly with very vague ideas of the history of English poetry. The error seems to lie in a total neglect of plan and system ; for, delighted with every interesting topic which occurred, the historical poet pursued it to its utmost verge, without considering that these digressions, however beautiful and interesting in themselves, abstracted alike his own attention, and that of the reader, from the professed purpose of his book. Accordingly, Warton's history of English poetry has remained, and will always remain, an immense common-place book of *memoirs to serve for such an history*. No antiquary can open it, without drawing information from a mine which, though dark, is inexhaustible in its treasures ; nor will he who reads merely for amusement ever shut it for lack of attaining his end ; while both may probably regret the desultory excursions of an author, who wanted only system, and a more rigid attention to minute accuracy, to have perfected the great task he has left incomplete.

It is therefore with no little pleasure that we see a man of taste and talents advance to supply the deficiency in so interesting a branch of our learning ; a task, to which Johnson was unequal through ignorance of our poetical antiquities, and in which Warton failed, perhaps, because he was too deeply enamoured of them. This is the arduous attempt of Mr Ellis ; and it remains to inquire how he has executed it.

The elemental part of the English language, that from which it derives, not indeed the greater proportion of its words, but the rules of its grammar and construction, is the Anglo-Saxon ; and Mr Ellis has dedicated his first chapter to make the English reader acquainted with it. The example of their poetry, which he has chosen to exhibit, is the famous war-song in praise of Athelstane's

Athelstane's victory in the battle of Brunenburgh ; an engagement which checked for ever the victorious progress of the Picts and Scots, and limited their reign to the northern part of Britain. We cannot, from this poem, nor indeed from any other remnant of Anglo-Saxon poetry, determine what were the rules of their verse. Rhime they had none ; their rythm seems to have been uncertain ; and perhaps their whole poetry consisted in the adaptation of the words to some simple tune ; although Mr Ellis seems inclined to think, with Mr Tyrwhitt, that the verse of the Saxons was only distinguished from their prose by ' a greater pomp of diction, and a more stately kind of march.' To this specimen of Saxon poetry, Mr Ellis has subjoined a translation of it into the English of the age of Chaucer, which we recommend to our readers as one of the best executed imitations that we have ever met with. It was written by a friend of Mr Ellis (Mr Frere, if we mistake not) while at Eton school, and struck us with so much surprise, that we are obliged to extract a passage, at the risk of interrupting our account of Mr Ellis's plan, to justify the extent of our panegyric.

' The Mercians fought I understond,
There was gamen of the bond.
Alle that with Aulof hir way hom
Over the seas in the schippes wom,
And the five sonnes of the kyng,
Fel mid dint of sword-fightinge.
His seven erlis died also ;
Mony Scottes were killed tho,
The Normannes for their mighty bost
Went home with a lytyl host.

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In Dacie of that gaming
Mony women hir bondis wring.
The Normannes passed that rivere,
Mid hevy hart and sorry chere.
' The brothers to Wessex yode,
Leving the crowen and the tode,
Hawkes, dogges and wolves, tho
Egles and mony other mo',
' With the dede men for their made,
On hir corses for to fede.
Sen the Saxonis first come
In schippes over the sea-fome,
Of the yeris that ben for gone
Greater bataile was never none.'

This appears to us an exquisite imitation of the antiquated English poetry ; not depending on an accumulation of hard words,
like

like the language of Rowley, which, in every thing else, is refined and harmonious poetry, nor upon an agglomeration of consonants in the orthography, the resource of later and more contemptible forgers, but upon the style itself, upon its alternate strength and weakness, now nervous and concise, now diffuse and eked out by the feeble aid of expletives. In general, imitators wish to write like ancient poets, without ceasing to use modern measure and phraseology; but had the conscience of this author permitted him to palm these verses upon the public as an original production of the fourteenth century, we know no internal evidence by which the imposture could have been detected.

From considering the state of the Anglo-Saxon poetry at and previous to the Conquest, Mr Ellis turns his consideration to that of the invaders, and treats at considerable length of what may be called the Anglo-Norman literature. It is well known, that the monarchs who immediately succeeded the conqueror, adopted his policy, in fostering the language and arts of Normandy, in opposition to those of the Anglo-Saxons, whom they oppressed, and by whom they were detested. The French poetry was not neglected; and it is now considered as an established point, that the most ancient metrical romances existing in that language, were composed, not for the court of Paris, but for that of London; and hence a British story, the glories of King Arthur, became their favourite theme. The ingenious Abbe de la Rue wrote several essays, printed in the *Archæologia*, which throw great light upon the Anglo-Norman poets; and of this information Mr Ellis has judiciously availed himself. But he also discovers by the explanations attached to his extracts from Wace, that intimate acquaintance with the Romanz language, which is at once so difficult to acquire, and so indispensable to the execution of his history.

In the third chapter, we see the last rays of Saxon literature, in a long extract from Layamon's translation of the *Brut* of Wace. But so little were the Saxon and Norman languages calculated to amalgamate, that though Layamon wrote in the reign of Henry II. his language is almost pure Saxon; and hence it is probable, that if the mixed language now called English at all existed, it was deemed as yet unfit for composition, and only used as a pie-bald jargon for carrying on the indispensable intercourse betwixt the Anglo-Saxons and Normans. In process of time, however, the dialect so much despised made its way into the service of the poets, and seems to have superseded the use of the Saxon, although the French, being the court language, continued to maintain its ground till a later period.

riod. Mr Ellis has traced this change with a heedful and discriminating eye, and has guided us through the harsh numbers of the romancers and the compilers of legends, and through the wide waste of prosaic verse, in which it was the pleasure of Robert of Gloucester and Robert de Brunne to record the history of their country, down to that period when English poetry began to assume a classical form, and to counterbalance, in the esteem even of the kings and nobles, the hitherto triumphant Anglo-Norman. This grand change was doubtless brought on by very slow degrees, and it is difficult exactly to ascertain its progress. The history of English Minstrelsy, in opposition to that of the Anglo-Normans, would probably throw great light on this subject; for these itinerant poets must have made use of the English long before it was thought fit for higher purposes. Mr Ellis has observed, justly, that the history alluded to is involved in great obscurity: nevertheless, before concluding, we intend to recommend it to his further attention.

The epoch from which English may be considered as a classical language, may be fixed in the reign of Edward III. the age of Gower and of Chaucer, in which it was no longer confined to what the latter has called 'the drafty riming' of the wandering minstrel, but employed in the composition of voluminous and serious productions by men possessed of all the learning of the times. The *Confessio Amantis* of Dan. Gower is thus characterized by Mr Ellis.

'This poem is a long dialogue between a lover and his confessor, who is a priest of Venus, and is called Genius. As every vice is in its nature unamiable, it ought to follow, that immorality is unavoidably punished by the indignation of the fair sex; and that every fortunate lover must of necessity be a good man, and a good christian; and upon this presumption, which perhaps is not strictly warranted by experience, the confessor passes in review all the defects of the human character, and carefully scrutinizes the heart of his penitent with respect to each, before he will consent to give him absolution.

'Because example is more impressive than precept, he illustrates his injunctions by a series of apposite tales, with the morality of which our lover professes himself to be highly edified; and being of a more inquisitive turn than lovers usually are, or perhaps hoping to subdue his mistress by directing against her the whole artillery of science, he gives his confessor an opportunity of incidentally instructing him in chemistry, and in the Aristotelian philosophy. At length, all the interest that he has endeavoured to excite, by the long and minute details of his sufferings, and by manifold proofs of his patience, is rather abruptly and unexpectedly extinguished: for he tells us, not that his mistress is inflexible or faithless, but that he is arrived at such a good old age, that the submission of his fair enemy would not have been sufficient for enlarging his triumph.'

We regret that our limits do not permit us to include our author's account of Chaucer, and his poetry. It has been warmly disputed in what particular manner the father of English poetry contributed to its improvement. Mr Ellis, with great plausibility, ascribes this effect chiefly to the peculiar ornaments of his style, consisting in an affectation of splendour, and especially of latinity, which is not to be found in the simple strains of Robert of Gloucester, or any of the anterior poets, nor indeed in that of Laurence Minot, or others about his own time.

In chapter ninth, the language of Scotland, and the history of her early poetry, comes into consideration. This is a thorny point with every antiquary. The English and Scottish languages are in early times exactly similar; and yet, from the circumstances of the two countries, they must necessarily have had a separate origin. Mr Ellis seems disposed to adopt the solution of Mr Hume, who supposes the Saxon language to have been imposed upon the Scottish, by a series of successful invasions and conquests, of which history takes no notice. To this proposition, in a limited degree, we are inclined to subscribe; for there is no doubt that the Anglo-Saxons of Bernicia extended themselves, at least occasionally, as far as the frith of Forth, occupied the Merse and Lothian, introduced into them their language, and, when conquered by the Scots and Picts, were in fact the *Angli*, to whom, as subjects of the Crown of Scotland, our Kings' charters were so frequently addressed. But we cannot admit these conquests to be supposed farther than they are proved; nor do we conceive that one province, though a rich one, could have imposed its language upon the other subjects of the kings who acquired it by conquest. There must have been some other source from which the Scoto-Teutonic is derived, than the Anglo-Saxon spoke in Lothian. This grand source we conceive to have been the language of the ancient Picts; nor would it be easy to alter our opinion. Those who are connoisseurs in the Scottish dialects as now spoken, will observe many instances of words in the idiom of Angus-shire (the seat of the Picts) which can only be referred to a Belgic root; whereas those of South-country idiom may almost universally be traced to the Anglo-Saxon. The Norman, from which, as Mr Ellis justly remarks, the Scottish dialect, as soon as we have a specimen of it, appears to have borrowed as much as the English, was probably introduced by the influx of Norman nobles, whom the oppression of their own kings drove into exile, or whom their native chivalrous and impatient temper urged to seek fortune and adventures in the court of Scotland. Having traced the origin of our language, the earlier Scottish poets, Barbour and Winton, pass in review, with specimens from each, very happily selected,

to

to illustrate at once their own powers of composition, and the manners of the age in which they wrote. These are intermingled with criticisms, in which the reader's attention is directed to what is most worthy of notice, and kept perpetually awake by the lively and happy style in which they are conveyed.

The merit of Occleve and Lydgate are next examined, who, with equal popularity, but with merit incalculably inferior, supported the renown of English poetry after the death of Chaucer. One specimen from the latter we cannot help extracting as irresistibly ludicrous.

' One of the most amusing passages in this poem (the Book of Troy) is contained in the seventeenth chapter, and relates to a well known event in the life of Venus. Lydgate thus expresses his indignation against Vulcan.

' The *smotry* * smith, this swarte Vulcanus,
That whilom in heaste was so jealous
Toward Venus that was his wedded wife,
Whereof there rose a deadly mortal strife,
When he with Mars gan her first espy,
Of high malice, and cruel false envy,
Through the shining of Phebus' beams bright,
Lying a-bed with Mars her owne knight.
For which in heart he brent as any glede, †
Making the slander all abroad to sprede,
And gan thereon falsely for to muse.

And God forbid that any man accuse

FOR SO LITTLE any woman ever!

Where love is set, hard is to dis-ever!

For though they do such thing of gentleness

Pass over lightly, and bear none heaviness,

Lest that thou be to woman odious!

And yet this smith, this false Vulcanus,

Albe that he had them thus espied,

Among Paynims yet was he defied!

And, for that he so FALSELY THEM AWOKE,

I have him set last of all my boke,

Among the goddes of false mawmentry ‡, &c. (Sign. L. i.)

' Upon this occasion, the morals of our poetical monk are so very pliant, that it is difficult to suppose him quite free from personal motives which might have influenced his doctrine. Perhaps he had been incommoded by some intrusive husband, at a moment when he felt tired of

* Smoky or smutty.

† A burning coal. *Loix.*

‡ Mahometry, i. e. idolatry. It may be proper to observe, that no part of this passage is to be found in Colonna's original. In general, indeed, Lydgate's is by no means a translation, but a very loose paraphrase.

of celibacy, and wished to indulge in a temporary relaxation from the severity of monastic discipline.*

From Lydgate our author proceeds to James I. of Scotland, upon whose personal qualities he pronounces a merited panegyric, accompanied with several extracts from the 'Kingis Quair.' The next chapter is peculiarly interesting. It contains a retrospect of the conclusions to be drawn from the information already conveyed, and this introduces a well-written and pleasing digression upon the private life of the English during the middle ages. We learn that, even in that early period, the life of the English farmer or yeoman was far superior in ease and comfort to that of persons of the same rank in France. Pierce Ploughman, a yeoman apparently, possessed a cow and calf, and a cart-mare for transporting manure; and, although, at one time of the year, he fed upon cheese curds and oat cakes, yet after Lammas, when his harvest was got in, he could 'dress his dinner to his own mind.' We also learn, that the peasants were so far independent, as to exact great wages; and doubtless these circumstances combined with the practice of archery, gave the English infantry such an infinite advantage over those of other nations, consisting of poor half-fed serfs, and gained them so many battles in spite of the high-souled chivalry of France, and the obstinate and enduring courage of our Scottish ancestors. Mr Ellis remarks on this subject—'It is very honourable to the good sense of the English nation, that our two best early poets have highly extolled this useful body of men, while the French minstrels of the twelfth, thirteenth, and fourteenth centuries, universally seem to approve the supercilious contempt with which the nobles affected to treat them.'† We have also much curious information concerning the dress of that period, particularly of the ladies, who in the day time seem to have been wrapt up in furs, and in the night time to have slept without shifts. The serenades, the amusements, the food, the fashions, the manners of the period, are all illustrated by quotations from the authors who have referred to them; and, with the singular advantage

* Suspecting that Lydgate had borrowed this singular passage from some French paraphrase of Colonna's work, I examined the anonymous translation in the Museum, (Bibl. Reg. 16. F. IX.), but could not find any traces of such a deviation from the original.

† We have noticed a solitary exception to this general rule.

'Quoique je di, et quoique non.
Nus n'est vilains, se, de cuer non;
Vilains est qui fait vilenie,
Ja tant iert de haute lignie.'

Fabliau de Chevalier des Clercs et des Vilains.

advantage of never losing sight of his main subject, Mr Ellis has brought together much information on collateral points of interest and curiosity, which will be new to the modern reader, and pleasing to the antiquary, by placing, at once, under his review, circumstances dispersed through many a weary page of black letter.

The reign of Henry VI. and those of the succeeding monarchs, down to Henry VIII. seem to have produced few poets worthy of notice. Two translators of some eminence occur during the former period, and the latter is graced by Harding (a kind of Robert of Gloucester *redivivus*); Hawes, a bad imitator of Lydgate, ten times more tedious than his original; the Ladie Juliana Berners, who wrote a book upon hunting in execrable poetry; and a few other rhimers, who, excepting perhaps Lord Rivers, are hardly worth naming. During this period, however, the poetry of Scotland was in its highest state of perfection; and Mr Ellis finds ample room, both for his critical and historical talents, in celebrating Henry the Minstrel, Henrysoun, Johnstoun, Merear, Dunbar, and Gawain Douglas. Upon the works of the two last, Mr Ellis dwells with pleasure; and his opinion may have some effect in refreshing their faded laurels. In the reign of Henry VIII. the Scottish bards continue to preserve their superiority; for, surely, the ribald Skelton, and the tiresome John Heywood, cannot be compared to Sir David Lindsay of the Mount, or to the anonymous author of the Mourning Maiden. In this last beautiful poem, the following passage embarrasses Mr Ellis:

‘Sall never berne gar breif the bill
At bidding me to bow.’

The meaning seems to us to be, ‘No one shall enrol the summons, which shall force me to yield to his suit.’ With this poem Mr Ellis closes the first part of his work, being the history of the English poetry and language.

We have already taken notice of the very extensive range of discussion which this sketch embraces. It was therefore almost unavoidable, that there should remain subjects on which we might have wished for farther information. The history of English Minstrelsy, in particular, makes too important a part of Mr Ellis's subject, for us to permit him to escape from it so slightly. As he has announced his intention to publish a second series of specimens, selected from the early metrical romances, we recommend strongly to him, to prefix such a prefatory memoir as may fill up this wide blank in the history of our language. We are the more earnest in this recommendation, because we know, from experience, that Mr Ellis will manage, with the temper becoming a gentleman, a dispute which, though the circumstance seems to us altogether astonishing,

astonishing, has certainly had a prodigious effect in exciting the irritable passions of our antiquaries, and has been managed with a degree of acrimony only surpassed by the famous and rancorous quarrel about the Scots and Picts. We observe, with pleasure, that, in repelling some attacks upon his first and second editions, Mr Ellis has uniformly used the lance of *courtesy*, as a romancer would have said; and truly we have no pleasure in seeing his contemporaries spur their hobby-horses headlong against each other, and fight at *outrance*, and with *fer emoulu*. Mr Ellis's style is uniformly chaste and simple, diversified by a very happy gaiety which enlivens even the most unpromising parts of his subject. We have only to add, that no author has passed over his own pretensions with such unaffected modesty, or given more liberal praise to the labours of others.

It cannot be expected, after dwelling so long upon the original part of the work, that we should have much to say upon the specimens which occupy the two last volumes. To each reign is prefixed a general character of the literature of the period; and to each set of specimens some account of the author and his writings. That of Spenser contains some new and curious particulars, with a short and able critique upon his style of poetry. We therefore extract it at length.

From satisfactory information that has lately been procured, it appears that Spenser was born about 1553, and died in 1598-9. He was educated at Pembroke-Hall, Cambridge, which he quitted in 1576; and, retiring into the north, composed his 'Shepherd's Calendar,' the dedication of which seems to have procured him his first introduction to Sir Philip Sidney. In 1579, he was employed by Leicester, to whom he had been recommended by Sidney, in some foreign commission. In 1580, he became secretary to Lord Gray of Wilton, then appointed Lord Deputy of Ireland; and, in 1582, returned with him to England. In 1586, he obtained a grant of 3000 acres of land in the county of Cork, and in the following year took possession of his estate, where he generally continued to reside till 1598, when, as Drummond relates on the authority of Ben Johnson, his house was plundered and burnt by the Irish rebels; his child murdered; and himself, with his wife, driven in the greatest distress to England. It was in the course of eleven years, passed in Ireland, that he composed his 'Fairy Queen.'

If these dates be correct, it will follow, that notwithstanding the illiberal opposition of Lord Burleigh, whose memory has been devoted to ignominy by every admirer of Spenser, the period during which our amiable poet was condemned.

To fret his soul with crosses and with cares,

To eat his heart with comfortless despairs,

was not very long protracted; since he began to enjoy the advantages of public office at the age of 26, and, at 33, was rewarded by an am-

ple and independent fortune, of which he was only deprived by a general and national calamity. Few candidates of court favour, with no better pretensions than great literary merit, have been so successful.

'Mr Warton has offered the best excuses that can be alleged for the defects of the *'Fairy Queen,'* ascribing the wildness and irregularity of its plan to Spenser's predilection for Ariosto. But the *'Orlando Furioso,'* though absurd and extravagant, is uniformly amusing. We are enabled to travel to the conclusion of our journey without fatigue, though often bewildered by the windings of the road, and surprised by the abrupt change of our travelling companions; whereas it is scarcely possible to accompany Spenser's allegorical heroes to the end of their excursions. They want flesh and blood; a want, for which nothing can compensate. The personification of abstract ideas furnishes the most brilliant images of poetry; but these meteor forms, which startle and delight us when our senses are flurried by passion, must not be submitted to our cool and deliberate examination. A ghost must not be dragged into day-light. Personification, protracted into allegory affects a modern reader almost as disagreeably as inspiration continued to madness.

'This however was the fault of the age; and all that genius could do for such a subject, has been done by Spenser. His glowing fancy, his unbounded command of language, and his astonishing facility and sweetness of versification, have placed him in the first rank of English poets. It is hoped that the following specimens, selected from his minor compositions, will be found to be tolerably illustrative of his poetical, as well as of his moral character.

'The three first books of the *'Fairy Queen'* were printed in quarto, 1590; and again, with the three next, in 1596.'

From the works of voluminous authors Mr Ellis has selected such passages as might give the best general idea of their manner; but he has also been indefatigable in seeking out all such beautiful smaller pieces as used to form the little collections, called, in the quaint language of the times, *Garlands*. His own work may be considered as a new garland of withered roses. The list concludes with the reign of Charles II. The publication seems to have been made with the strictest attention to accuracy, except that, throughout the whole, the spelling is reduced to the modern standard, for which we fear Mr Ellis may undergo the censure of the more rigid antiquaries. For our part, as all the antique words are carefully retained and accurately interpreted, we do not think that, in a popular work, intelligibility should be sacrificed to the preservation of a rude and uncertain orthography. As an example of the amatory style of Charles the First's reign, from which our later poetasters have securely pilfered for their mistresses' use so many locks of gold and teeth of pearl, not to mention roses and lilies, we insert the following song from *Ca-rew*.

'Ask

' Ask me no more where Jove bestows,
When June is past, the fading rose;
For in your beauty's orient deep,
These flowers as in their causes sleep.

Ask me no more whether do stray
The golden atoms of the day;
For in pure love heaven did prepare
Those powders to enrich your hair.

Ask me no more whither doth haste
The nightingale; when May is past;
For in your sweet dividing throat
She winters, and keeps warm her note.

Ask me no more where those stars light,
That downwards fall at dead of night;
For in your eyes they set, and there
Fixed become as in their sphere.

Ask me no more if east or west
The phoenix builds her spicy nest;
For unto you at last she flies,
And in your fragrant bosom dies.'

It only remains to mention, that there are prefixed to these volumes two accurate lists of English poets, one chronological, and the other alphabetical, from 1230 to 1050; and that there is an Essay at the conclusion, in which the author's opinion concerning the origin of language is condensed and recapitulated.

ART. XI. *Inquiries concerning the Nature of a Metallic Substance, lately sold in London as a New Metal, under the Title of Palladium.*
By Richard Chenevix, Esq. F. R. S. and M. R. I. A. From Philosophical Transactions for 1803. Part II.

WE consider this as a very excellent paper; and, since the subject is not only curious in detail, but may lead to several important general views, we shall devote a few pages to such an account of Mr Chenevix's inquiries, as may introduce them to the acquaintance of our readers.

An advertisement was circulated last spring, describing the chemical properties of a *new noble metal*, called *palladium*, or *new silver*. Specimens of it were exposed to sale; and no account whatever was given of the manner or the place in which they had been procured. They had all undergone the operation of the flattening mill, and were formed into thin laminæ. Nothing like an unwrought specimen, a bit of the ore, or a portion of its ma-

trix, was either described or exhibited. No person of scientific authority came forward to vouch for the account given of the singular properties which this substance was said to possess; and those properties were only unfolded as an advertisement of an article of commerce. All these circumstances contributed to involve the authenticity of the specimens in a great degree of suspicion, and to render it extremely probable that the substance exposed to sale as a new metal, was only a compound or other modification of known minerals, effected by artificial means. With a view to the determination of this point, Mr Chenevix undertook the course of experiments which forms the subject of the paper now before us. And, as he very soon discovered, in the samples which he examined, properties extremely different from those of the known metals, he was led to extend his inquiries, and to procure, for this purpose, the whole of the specimens offered to the public by the proprietor. In presenting our readers with an abstract of this investigation, we shall consider, *first*, the experiments made upon the properties and habitudes of this doubtful substance: these did not suffice to determine its precise nature, which was only discovered, by attempting to form a similar body from a union of simple substances. We shall, in the *second* place, consider the synthetical experiments. After having by this process ascertained the component parts of palladium, our author endeavoured to separate the compound body into its ingredients: These attempts to analyse the alloy will form the last object of attention.

1. The specific gravity of the specimens varied from 10.972 to 11.482: a heat much greater than that of melting gold was required to fuse them; and the specific gravity of the button was increased to 11.571. Sulphur makes it melt at a low temperature, and forms with it a very brittle sulphurate. Charcoal appears to have no sort of affinity with palladium. This substance, when polished, resembles platina very nearly; when melted, it assumes the appearance of crystallization, and is extremely malleable.

The alloy of palladium with equal parts of silver, had a lower specific gravity than palladium itself: the alloy with platina had a much greater specific gravity: the alloys with lead and bismuth bore a striking resemblance to each other; a new circumstance, our readers will remark, in the analogy formerly pointed out between those two metals by Mr Hatchett. (No. VI. p. 454.)

The alkalis act weakly on palladium, with the assistance of atmospherical air. The mineral acids act much more violently, particularly the nitric and muriatic, and most of all the nitromuriatic acid. With all these solvents it forms a red liquor,
from

from which it is precipitated in the form of an orange-coloured powder, by alkalis, earths, and all the metals except gold, silver, and platina.

Notwithstanding the analogy of many of the properties of palladium to those of platina, yet, in several respects, the above experiments were entirely irreconcilable with the known habits either of that substance, or of gold or silver. Some other tests which our author applied, rendered it equally improbable that either lead, copper, or mercury, should have contributed to the formation of this singular body. Above all, the specific gravity of palladium and its habitudes, both with the acids and with respect to the other metals, were such as could never have been expected from the known properties either of platina or mercury; and yet our author found, rather by a casual experiment than by the result of the trials above analysed, that those two metals might be so united as to form a compound in which the most obvious properties of each were entirely concealed, and new properties exhibited, exactly corresponding with those of palladium.

II. When a solution of platina is made by nitro-muriatic acid, and red oxide of mercury made by nitric acid is added to the former solution until it is saturated; and when the whole mixture is heated with green sulphate of iron: a copious precipitate of metallic powder is formed, which is with difficulty fusible into a button, which readily melts when sulphur is added, is soluble in nitric acid, has a specific gravity of 11.2, and is entirely similar to palladium. This alloy contains about one part of mercury and two of platina.

If in this experiment there be substituted for sulphate of iron, either iron, zinc, or phosphate of ammonia, no palladium is produced; nor can platina and mercury be united so as to form palladium, either by direct trituration and digestion, or by mixture of their solutions in acids, or by exposing the two bodies together to violent degrees of heat, or by passing the vapours of the one over the other in a state of intense fusion, or by exhibiting the metals to each other under the action of the most powerful galvanic pile. By two methods besides the one first ascertained, palladium may be formed: sulphurated hydrogen gas may be passed through the mixed solution of platina and mercury; or the precipitate of platina by ammonia, from its solution in nitro-muriatic acid, may be trituated with mercury, and then exposed to a violent heat. The success of both these methods, however, is extremely uncertain; and the union of the metals in every way, except the process of reduction by sulphate of iron, seems to depend upon so great a number of unknown circumstances, that the operation may fairly be considered as one of the most capricious

in chemistry. We are, however, warranted in concluding, that various alloys of mercury and platina may be formed, which do not possess the distinguishing properties of palladium. To unite the two metals so as to increase the fusibility and diminish the specific gravity of the platina, is by no means difficult: But the compound does not acquire the characteristic qualities of palladium until a much greater proportion of the mercury has been combined; and its solubility in nitric acid only takes place when the specific gravity has been reduced to 12 or 12.5.

III. It is singular with what force the component parts of palladium are united, notwithstanding their repugnance to enter into combination. All the experiments which our author made with a view to analyse this substance, completely failed. He tried the converse of all his synthetical operations without effect. He exposed palladium to a violent heat; subjected it to cupellation; burnt it both in oxygen gas and by means of the galvanic pile, without the slightest tendency to separation being evinced by the component parts. When it was burnt, a thick white smoke arose, which, on being collected, was found to consist of palladium, entirely unaffected by the operation. These experiments were tried not only upon the specimens exposed to sale, but upon the substance produced by our author's experiments; and, what is not a little remarkable, it was found as impossible to decompose the imperfect kind of palladium, formed by a slight union of platina and mercury, as to separate these two metals, from the union of which they are susceptible in the largest proportions.

Mr Chenevix concludes his paper with some experiments upon the mutual affinities of metals, and the affinities of platina with acids. The former class of experiments is not very interesting: in the latter, it is ascertained that sulphuric acid has a stronger affinity for platina than muriatic acid; from whence our author infers, that the opinion is fallacious which accounts for the solution of platina in nitro-muriatic acid, upon the supposition that the muriatic acid assists the process in the same manner as sulphuric acid aids the decomposition of water by iron. One argument, which he omits to adduce on this point, may be drawn from the opinion now universally entertained by the best chemists, that, in the nitro-muriatic acid, neither of the component acids exists entire, as the sulphuric acid exists in its mixture with water; but that, in fact, a new acid, with a separate radical, is formed by the combination of the other two.

Mr Chenevix has in this, as in all his other papers, needlessly exposed himself to criticism, both by the affectation of his nomenclature, and by the introduction of general reflections; a department

partment of writing in which he does not very eminently excel. We are at a loss to perceive the necessity of rejecting the terms *oxygenate* and *oxidate*, for *oxygenize* and *oxidize*, with their clumsy derivatives, *oxygenizement* and *oxidizement*. *Concentrate* (for *concentrated*) we are inclined to rank among errors in grammar, rather than neologisms. *Solidification* is a word which we apprehend owes its being to Mr Chenevix; and it is rather unaccountable how so scrupulous a nomenclator should retain the old barbarous term *ennabar*. We are happy to observe, however, that he has overcome his antipathy to the term *oxide*, founded, if we rightly remember, on the notion that this word is apt to be confounded with *oxide*. And, whatever objections our author's scientific phraseology may be liable to, we would infinitely rather have him coin as many new words, or revive as many obsolete ones as he pleases, than continue his former practice of stopping perpetually to introduce a dissertation upon the propriety of his language.

With respect to his general observations, the following extract may perhaps justify our inability to applaud his talent for this species of writing.

'If a theory is sometimes useful as a standard to which we may refer our knowledge, it is at other times prejudicial, by creating an attachment in our minds to preconceived ideas, which have been admitted, without inquiring whether from truth or from convenience. We easily correct our judgment as to facts; and the evidence of experiment is equally convincing to all persons. But theories not admitting of mathematical demonstration, and being but the interpretation of a series of facts, are the creatures of opinion, and are governed by the various impressions made upon every individual. Nature laughs at our speculations; and though from time to time we receive such warnings as should awaken us to a due sense of our limited knowledge, we are presented with an ample compensation in the extension of our views, and a nearer approach to immutable truth.' p. 317.

The two most remarkable circumstances in the constitution of palladium, for the knowledge of which the scientific world is indebted to Mr Chenevix, are the peculiarity of the properties that distinguish it from every other metal, and the impossibility of decomposing it by any known process. He has insisted a good deal upon the singularity of its qualities differing so widely from those of mercury and platina; but we acknowledge ourselves unable to perceive any thing peculiar in this difference. It is one of the most general laws of elective attraction, that the compound body possesses properties entirely different from the ingredients by the union of which it is formed. Nothing surely can less resemble sulphuric acid, than sulphate of soda; nor can any bodies exhibit less similarity than water or steam, and

the two gases which compose it. The effects produced by a variation in the proportions of the constituent parts of palladium, are not to be compared with the changes produced by varying the proportions of the two gases which compose the atmosphere: no amalgam or alloy of mercury and platina differs so essentially from palladium as atmospherical air differs from nitrous gas and nitric acid. The constitution of the vegetable oils and alcohol, and of the different vegetable acids, affords various other instances of a much greater dissimilarity between compound bodies and their component parts, and of a much greater diversity produced by changing the relative proportions of the ingredients, than any which the experiments of Mr Chenevix have exhibited in the case of the metals.

We must therefore confine our acknowledgment of the importance of these experiments to the circumstance of a metallic substance being presented by them, entirely different from every other; and though evidently a compound, yet incapable of direct analysis by any known process. The indisputable certainty of this fact may teach us to regard with less contempt the great object of the earlier chemical experimentalists; and, without diminishing our just reprobation of the unphilosophical spirit in which their inquiries were conducted, may incline us to believe in the possibility of those transmutations, the pursuit of which has covered with ridicule every thing that bears the name of alchemy.

ART. XII. *Discourses on Theological and Literary Subjects*: By the late Rev. Archibald Arthur, M. A. Professor of Moral Philosophy in the University of Glasgow. *With an Account of some Particulars in his Life and Character*: By William Richardson, M. A. Professor of Humanity in the University of Glasgow. Glasgow, at the University Press: Printed by J. & J. Scrimgeour. Longman & Rees, London. 1803.

IN an advertisement prefixed to this work, we are informed by the learned editor, that the 'following Discourses were not intended by their author to be published as they now appear. With the exception of three or four, none of them ever seem to have been written over by him twice. The liberty taken in offering them to the public, was from the wish entertained by his near relations, of preserving and doing honour to his memory; which they thought could be done, even though, the works to be published were as imperfect as has now been mentioned.' Such an intimation as this would necessarily preclude much of the severity of criticism, even if the Discourses to which

it relates were really less valuable than we have found them ; but as many of them possess considerable merit, we are sensible of the benefit which his relations and the editor have conferred on the public by printing them, such as they are. Before proceeding to the work itself, we shall notice a few particulars in the account of the author's life and character, which the editor has subjoined in the form of an Appendix.

‘ His father (we are informed) was a considerable farmer in Renfrewshire ; and his parents, being persons of great worth, and having such a considerable degree of knowledge as is not unusual among respectable farmers in Scotland, were capable, while teaching their son to read English, of imparting to him other useful information ; and of awakening in the tender mind of the child, those affections, and that sense of duty, which might afterwards be required of him in discharging the important functions of manhood.’ p. 493, 494.

After passing some years at a grammar school in Paisley, he was removed, in his fourteenth year, to the University of Glasgow ; the scene of his future labours. Here his abilities soon attracted the notice of Mr Moorhead and Dr Moor, the teachers of the Latin and Greek languages at that time ; men (says Mr Richardson) not more eminent for their taste and erudition, than for their goodness of heart and attachment to early merit.’ As he made choice of the clerical profession (we are told), that ‘ he applied with great diligence to that course of philosophical study which is held necessary to the knowledge of theology, and the duties of a clergyman.’ This we certainly find no difficulty in believing ; but we must suspect the partiality of friendship, when Mr Richardson proceeds to transform Mr Arthur into a kind of Sir Isaac Newton, telling us that the

— capacity of his mind enlarging itself in the course of intellectual exertion, became so great, that in his riper years no discovery in science was too extensive, or too vast for his comprehension. Along with this, his habits of profound and accurate thinking discovered themselves by the surprising facility with which he was able to apprehend the most abstruse and difficult subjects of philosophical and abstract inquiry. Nor was there any disquisition so intricate, as that his acuteness and perspicuity could not unravel and unfold its perplexities. Nor were his talents for extensive comprehension, and the ready conception of scientific knowledge, confined to any one department.’ p. 497, 498.

The fact which follows this splendid encomium is, however, a proof that he was a man of uncommon and various acquirements : ‘ Both before and after his appointment to a professorship, he lectured, when occasion required, in logic, botany, and humanity ;’ and, ‘ during the necessary absence of the Professor of Church History, he lectured for a whole session of College, in that department,’ with very great reputation.

Soon

Soon after obtaining his license from the Presbytery, he was appointed chaplain to the University of Glasgow, and was much esteemed as a preacher. He became likewise librarian to the University, and gave general satisfaction to that learned body, by making a most distinct catalogue of the books contained in the college library. His merit as a preacher had already obtained for him an additional appointment, in being made assistant to Dr Craig, a clergyman of great eminence in Glasgow; and he was soon about to receive a still more conspicuous mark of the value in which his attainments were held by men of discernment, in being recommended by Dr Reid to the University as a fit person to assist and succeed him in the honourable capacity of Professor of Moral Philosophy. While he was yet but little known to that judicious philosopher, he preached a sermon in his hearing, of so much merit, that, at the conclusion, Dr Reid whispered to one of his brethren, 'This is a very sensible fellow, and, in my opinion, would make a good professor of morals.' Dr Reid lived fifteen years after Mr Arthur was nominated to this appointment; and the latter enjoyed it only one year after the death of the former. Some specimens of his ability as a professor are now given to the public in the first part of the following Discourses.

In his moral character, Mr Arthur appears to have been amiable and benevolent, steady in his purposes, and friendly to the good order and peace of society. His greatest peculiarity was

— 'an invincible bashfulness, of which the habit continued to clog his manner, or impede his exertions, during the whole course of his life; and which contributed, perhaps, to promote, or to confirm a slight, but ungainly hesitation in his speech; from which he was never, but very seldom, or occasionally released. On some occasions, however, when he arrived at manhood, and in the after course of his life, he experienced such release. There were luminous moments, which his friends can never forget, when the ease of intimacy, and the hilarity of social enjoyment, unbarred his utterance, and gave vent to a torrent of most impressive elocution, rich in science, abounding with information, and flowing in a stream of correct, yet spirited diction; of which the effect seemed to be so much the more powerful, that its commencements were so reluctant.' p. 494, 495.

He died in 1797. And here most biographers would have stopped; but the learned Professor has made an effort to astonish us, by concluding his narrative with a laboured and puerile imitation of that splendid passage in Tacitus's *Life of Agricola*, in which the Roman historian expresses his assurance that Agricola, though dead, still enjoys a perpetuity of existence and of happiness! We certainly are not at all inclined to doubt

doubt that Mr Arthur has received the reward of his virtues ; but we cannot help thinking that the learned biographer has thrown a degree of ridicule both upon his friend, and on a very important doctrine, by his affected and strained manner of expressing himself on the subject. For instance, he must quote Milton, and tell us, that ' sunk though he be—so sinks the day-star in the ocean-bed,' &c. If Mr Richardson think it absolutely necessary to quote poetry, and to turn his friend into a star, we would recommend a line of Virgil as considerably more appropriate—

' ARCTURUM, pluviasque Hyadas, geminosque Triones.'

It will be a relief to our readers to turn from this instance of *falsetto*, to the sound and plain sense displayed in Mr Arthur's own compositions. He is very far from ever being perversely or absurdly eloquent ; and, indeed, if there be any defect in his style, it is, that his simplicity approaches to tameness.

The Discourses are divided into two parts ; the first of which comprehends Theological, and the second Literary Discourses. The first are a specimen of Mr Arthur's Lectures ; the second were chiefly read in a literary society of which he was a member. The subjects of the Theological Discourses are as follows: 1. On the argument for the existence of God, from the appearances of design in the universe : 2. Observations by Mr Hume, on the existence of God, considered : 3. The goodness of God defended from the objections of Mr Hume : 4. On the justice and moral government of God : 5. Of evils and their causes, and of the systems respecting them.

It cannot be supposed that we should enter into a minute analysis of the different reasonings contained in these Discourses. The subject precludes any thing like novelty ; and very probably all the reasonings which Mr Arthur has advanced on these first principles of religion may be found in the writings of those distinguished men who preceded him in the same walk. We may however affirm, that he has always treated his subject with precision and clearness ; and is both very candid to the acute adversary whom he opposes, and very successful in wielding those weapons which Dr Reid had put into his hands. In the first Discourse, for instance, after stating, as is commonly done, the evident marks of design in the universe, he places upon its true foundation the inference which we draw, that these must necessarily have been produced by intelligence or a designing cause.

' These judgments which we form concerning Causes, from observing their Effects, must be founded upon an original principle in our constitution. They are universal, and yet nobody assigns a reason for them. They are evidently not conclusions from reasoning. It is impossible to
point

point out any intermediate steps by which they are proved; and nobody has attempted it. No man can give any argument by which it can be shewn, that a mathematical figure must be the work of an intelligent being, and could not be the work of a fowl or of a quadruped. We judge indeed in this manner, but we can assign no reason for our judgment any more than we can assign any reason why we judge that two and two make four. Neither did we learn to judge in this manner by experience. From experience we can acquire knowledge only concerning contingent truth or matters of fact, which may be, or may not be, without any absurdity. We can never learn from experience any knowledge concerning necessary truths which must be, and which it involves an absurdity to suppose not to be. We may learn from experience, that bodies gravitate. This is not a necessary truth; it is only contingent, and depends on the will of the Creator; and if He had pleased, body might have had opposite properties, or might not have existed. But we cannot learn from experience, that the whole is equal to all its parts. This is a necessary truth, and necessarily flows from the notions we have of a whole and of its parts. It must be true; and it is impossible and involves absurdity, to think otherwise. Now, our judgments concerning the connexion of effects and causes, are judgments concerning necessary truths. We do not judge that the connexion *may* take place, but that it *must* take place. These judgments, therefore, are of such a nature, as experience cannot suggest.' p. 15-17. *

The principles stated in this quotation are afterwards applied very successfully to the confutation of Mr Hume; and although we refrain from entering more minutely into this speculation, we will not hesitate to recommend to the attention of our readers, particularly those who may have been perplexed by Mr Hume's ingenuity, these Discourses of Mr Arthur, who has collected into one point of view all the scattered reasonings of Dr Reid on the subject, and illustrated every position with familiar and striking instances.

In the third Discourse, he defends the goodness of the Deity from the objections of the same able and sagacious disputant. He begins with stating, that the chief objections to the goodness of God arise from exaggerated and gloomy pictures of human misery. That such views are far from being correct, he proves from several considerations. The following observations, we think well worthy attention.

'If we were to refer the matter to every man's determination, and if every man were to declare honestly what he had felt, the determination of the question, with respect to human happiness, might be reduced to a very narrow compass. There is no man who has not spent many more days of happiness than of misery. Consider the situation of the generality of mankind, and think what can be added to their felicity. Almost the whole of them wish for something more than they have. This is a spu

to their exertion. But what they have in view is generally a trifle, in comparison of what they already actually possess. If a man be provided with the necessaries of life, or be able to provide them by his labour; if he enjoy tolerable health, and be conscious of no crime; he can hardly feel much uneasiness, unless he be haunted by some of those phantoms of the imagination which men sometimes raise to disturb their own repose.' p. 65, 66.

The limitation of his doctrine in the following passage is stated, we think, with great candour and moderation.

'If God had so pleased, he could undoubtedly have rendered every being he has formed completely happy. He could have made them incapable even of rendering themselves miserable: He could have made them necessary, instead of voluntary agents; and compelled them to act in the way that would infallibly have produced felicity; or he might have contrived things in such a manner, that they must have been happy in whatever way they acted. He has not ordered matters in any such way; and therefore we may be sure that he never intended to do so. Every thing is so conducted, that his creatures arise to greater and greater degrees of happiness, in consequence of their own exertion, and in consequence of the improvement which, by his appointment, follows from their exertions. The more wise and the more virtuous they become, the more happy they are of consequence. It is evident, therefore, though the Deity intended to communicate happiness, and has done so in the most liberal manner, yet this was not the only end which he had in view. His beneficence must be considered as connected with the other active principles of his nature. He intended to make man happy; but it was in a particular manner, which he knew would at last contribute to the greatest general felicity of the species. If we suppose benevolence, or the disposition to confer immediate or unqualified happiness, to be the only principle of action in the Divine Mind, we can see no reason why there should be evil of any kind in the world at all; since, undoubtedly, his wisdom was sufficient to foresee it, and his power to prevent it. But since there is much more happiness than misery in the world, we have sufficient reason to conclude that he acted from benevolence. The presumption arising from this consideration evidently is, that he must have also had other principles of action besides benevolence; but whether subservient to it, upon the whole, or not, is not the present question.' p. 82, 83.

To Mr Hume's ingenious argument against ascribing any higher degree of goodness to the Deity than is displayed in his works, Mr Arthur also makes a very satisfactory answer in the latter part of this discourse.

In the fourth discourse, on the justice and moral government of God, we meet with some very elegant observations on the punishment which vice necessarily carries along with it.

The remarks on a future state, with which the discourse concludes, appear to us to place the reasonableness of that doctrine in a very striking light.

'The

'The present plan of the Divine Government renders this expectation more strong and better founded, than it would have been upon any other supposition. If there had been no tendency in virtue to produce happiness, nor in vice to produce misery at present, we could not have had any certainty that there is a moral administration established; and from observing the present course of things, and seeing that virtue and happiness were perfectly disunited, we would have been apt, from analogy, to conclude, that they would always be disunited, and that there would be no state of retribution. Perceiving no reason to believe that God is just, we could not, on such a supposition, be led to conclude, that he would some time or other act as a just and impartial judge. If, on the contrary, virtue had been always fully and invariably rewarded in this state of things, and vice, in like manner, fully and invariably punished; if happiness and virtue, vice and misery, had been uniformly united, and never been separated; we might have been much more uncertain of a future state, than we are at present. Such a state would be a perfect state, and we could perceive no end that could be served by any alteration in it. If men, therefore, died under such a dispensation; or, in other words, went out of that state; we might be apt to think they had fully received their reward, and were never more to exist.

'There is, however, another view of the matter, even upon this supposition, that would still leave the question in suspense; for if God be good and just, it cannot be believed, that he would exterminate from existence, those whom he had already countenanced and rewarded: And therefore, if he took them away from their present condition, it must be to answer some good ends to them; and since they were happy here, the only end he could have in view, would be to render them still happier in another state. The government, however, that is in fact established, in which we see clear and manifest marks of a moral administration of justice and equity, but intermixed with certain irregularities and exceptions, furnishes us with an argument in favour of a future state of existence, much more convincing than any that could be suggested by an administration apparently more perfect and impartial. It leads us to consider ourselves as only in the beginning of our existence, in a state of trial and of discipline; and it necessarily directs our views to another connected with and founded upon it, which will be a state of final retribution.' p. 125, 126.

We have already given so many quotations from these discourses, that we are afraid to enter on the next, 'of evils and their causes, and of the systems respecting them,' lest we should be tempted to swell this article greatly beyond its proper bounds. We shall therefore leave the depths of theology, with once more assuring our readers, that if they are inclined to venture into these arduous paths, they cannot easily entrust themselves to the conduct of a safer or more intelligent guide than Mr. Arthur.

Mr. Arthur's first discourse, in the second part of the work, is 'on qualities of inanimate objects, which excite agreeable sensations.' He observes that there are varieties in these sensations.

'A gentle flowing rivulet, and an impetuous torrent, do not affect us in the same manner. The mind is disposed to tranquillity by the one, and roused and agitated by the other. The distinction between the sensations occasioned by sublime and by beautiful objects, is universally known. The characters of these sentiments are exceedingly different. The sensation of beauty is gay and enlivening. The sensation of sublimity is solemn and elevating.' p. 184, 185.

The sentiments of men, however, are not always uniform, in these respects: Some men have emotions of sublimity and beauty, from perceptions which do not occasion these feelings in others; but notwithstanding such diversities, there is a regularity in these sentiments, on the whole, which is a proof that they are not founded on caprice.

'When men are placed in situations in which their passions are altogether uninterested, they discover little variety in their judgments concerning beauty and sublimity. The rainbow and the morning sky have called forth the same sensations in all ages: The parterre of modern times exhibits the same flowers that were cultivated by former generations: The forms of human beauty which charmed the remote ages of antiquity, transmitted to future times by the art of the statuary, are still looked upon as patterns of excellence.' p. 189.

Mr Arthur endeavours to point out, in this discourse, the circumstances in the colour and figure of external objects, which occasion the sensation of beauty. Most of our readers are probably acquainted with the elegant theory of Mr Alison, which accounts for all our perceptions of sublimity or beauty in inanimate objects, from their habitual association with some simple ideas of emotion, and the consequent suggestion of something interesting to our selfish or sympathetic feelings. This theory, which had been imperfectly anticipated by those who resolved the impressions of beauty into a perception of utility, fitness, &c. had not been communicated to the public when Mr Arthur composed these discourses. He accordingly follows the footsteps of Hogarth, Hucheson and Burke, in ascribing the emotions produced by beautiful objects to the direct agency of their external qualities, and applies himself to the enumeration of those properties that appear to produce this effect. In his opinion, the circumstances in external objects which occasion the sensation of beauty, are 'insensible connexion' and 'quick succession' of shades in colour, and parts in figure. He illustrates this position from the example of the verdure of nature.

'It is equally removed from the fierceness of the red, and the languor of the violet. The surfaces on which it is usually seen, are smooth and glossy. Hence the different lights exhibit upon them all the shades of this colour, from that which approaches the blue to that which joins the yellow, insensibly connected with one another. At the same time,

no one shade occupies so large a space as to be contemplated by itself, separately from the shades connected with it. These two circumstances of insensible connexion, and quick succession among the different shades, seem to be the cause that this colour upon vegetables is so highly agreeable, as all acknowledge it to be. By means of the insensible and uninterrupted connexion which subsists among the different shades, it assumes the appearance of a regular whole, and enters the mind with the greatest facility. The quickness of the succession occasions the gaiety of the sensation. When the mind broods over a single thought, it is in a solemn state; but when a variety of objects, so united as not to embarrass it, are presented before it, it is gay and cheerful. Similar observations may be made on all the other beautiful colours.' p. 191, 192.

Similar observation he applies to figure; and those on Mr Hogarth's line of beauty appear to be just and ingenious. He then proceeds to show, in opposition to Mr Burke, that angular figures are frequently beautiful, although he admits that a square is less beautiful than a circle.

'The parts of which it is composed are connected, as belonging to a whole; but they are large and few, and do not follow one another in quick succession. The sensation, therefore, has little gaiety.' p. 195.

To render his opinions more precise, he tells us, that forming our conceptions of beauty, it is proper to throw out of consideration every thing except *colour* and *figure*; and that though utility, or other considerations, may render the sight of an object agreeable or desirable, it is always easy to distinguish this sort of affection from that which is produced directly by its beauty. Beauty, he concludes, is not the common name of every thing which excites agreeable sensations: 'it is property of colour and figure alone, and belongs to nothing else, in a proper sense.'

Now, even if we could pass over the fundamental error of this theory, it appears to us that it is evidently liable to the charge of inconsistency. Beauty, according to Mr Arthur's own hypothesis, is not perceived immediately by any organ or faculty of the mind, it results merely from the excitation of lively and various ideas, suggested by the rapid succession of connected parts in a beautiful object; but if this be the case, every thing else that excites a rapid and lively succession of ideas should be denominated beautiful, as well as the alterations of colour and figure; and if it be undeniably true, that many external objects do suggest a variety of lively ideas, that have no connexion with colour or form, it seems altogether unreasonable to deny that their beauty is increased or occasioned by these associations. The beauty of any object, according to Mr Arthur's definition of it, consists in its power of exciting lively ideas; and it is evident that he has given a defective account of the causes of their beauty, if such ideas may

may be excited, as they indubitably may, by other qualities than the shape and the colour.

In the two following discourses, however, Mr Arthur proceeds to accommodate the theories of Mr Burke and Dr Hutcheson, concerning beauty, to his own; and he certainly points out, with great acuteness, what is erroneous in their opinions; and shews that, in as far as they are correct, they coincide very much with those which he had previously asserted. Our limits will not now permit us to enter into an investigation of our author's doctrines in the subsequent essays. We add the following judicious observations upon the alleged influence of custom in matters of taste.

'Suppose a man to have spent the whole of his life in a village, in which there is only one elegant house, and all the rest are mean cottages; will not this person pronounce that house the most beautiful in the village? On what does he found his judgment? It is, no doubt, the most rare form of a house he has ever seen; but surely it is not also the most common, for all the other houses in the village resemble one another more than they resemble it. Let a man who has visited all the cathedrals in the kingdom, be brought to St Paul's, it will appear to him unlike any of those which he had formerly visited. All those great buildings which he had been examining, were built in the form of a cross, and in the Gothic style of architecture: All of them had a considerable resemblance to one another. He now beholds a building of a very different kind; but it will not, on that account, appear to him deformed or monstrous. He will certainly admire it as a noble piece of architecture.—Is there a child who does not prefer a smooth surface to a rough one; and a regular figure, in which all the parts are connected with one another, to an unformed and unconnected mass? The long arched neck of the swan is singular among birds, and the branching antlers of the stag among beasts; but they are not upon this account reckoned ugly or monstrous: On the contrary, all acknowledge that they are beautiful.' p. 332-3.

'It is readily acknowledged, that agreeable sensations are derived from an attention to the laws of custom and fashion. These, however, ought to be distinguished from those pleasures of taste which are derived from what is really beautiful or grand in the works of nature or of art. In all probability, it has principally been owing to a neglect of this important distinction, that the principles of taste have sometimes been represented as arbitrary and capricious. Every thing which entirely depends upon custom, is certainly capricious. But there are many agreeable objects that have continued throughout all ages to be agreeable. Fashion may sometimes oppose the natural principles of beauty and elegance; but whenever it does so, it cannot be very lasting. The love of grace and elegance must at last prevail, though it should be after a tedious struggle. The fashion in gardening, and in building, is now more suitable to nature than it formerly was; and, in all probability, it will last much longer than those fashions which immediately preceded it.

It is not to be suspected that the opulent will soon return to the Gothic arch, the narrow-grated window, the long avenue, the formal terrace-walk, the *jet-d'eau* from the mouth of a triton, and the cascade supplied from the temple of a water-nymph. p. 389.

On the whole, although there is nothing very original in Mr Arthur's speculations, yet they always indicate a clear and intelligent, if not a very profound mind. If they will not add much to the information of the philosopher, they will at least assist the conceptions of the student; and, in point of writing, they are certainly of a superior order to the compositions which generally fall under our review. Making allowance for a few Scotisms, which the learned editor might have taken upon him to correct, without any fear of abusing the trust reposed in him, the language is, in general, pure, chaste, and unaffected; although, as we have already hinted, bordering too frequently on feebleness and languor.

Having said this, we think we have said enough; and are not conscious of lying under any obligation to promise immortality to these discourses, as Mr Richardson appears inclined to do in the concluding paragraph of his biographical sketch. Speaking of Mr Arthur's relations, he says,

'They have thus erected a monument to his memory, more permanent, and more satisfactory, than any that could have been executed by the chisel or by the pencil. These must perish; but this will endure: and, if their partiality does not deceive them, will transmit to posterity the portraiture and likeness, not of a frail and perishing body, but of a mind actuated by the best principles, and endowed with superior powers.' p. 517.

This is no doubt very fine, although not quite equal to the pattern passage in Tacitus; but we suspect there is more eloquence in it than the occasion required. Indeed, that immortality which authors and their friends are so fond of predicting, is a poor business at the best; and the frequent failure of the prophecy gives a ludicrous air to its repetition. It will be enough if the author succeed in edifying the present generation.

ART. XIII. *Remarks on the Constitution of the Medical Department of the British Army; with a Detail of Hospital Management; and an Appendix, attempting to explain the Action of Quinine in producing Fever, and the Operation of Remedies in affecting Cure.* By Robert Jackson, M.D. 8vo. London. 1803. pp. 352.

THE singular and motley production before us was written, as we are informed in the preface, with the twofold design of directing the attention of Government to the Improvement

ment of military medicine, and of vindicating the reputation of the author from certain charges of mal-practice and mismanagement, which were preferred against him while physician to the hospital of the *Army-Dépot* in the isle of Wight. For the credit, however, of the writer, (whose former works are not entirely unknown to us), and for the honour of the medical profession, we could have wished that it had not appeared; for we do not recollect to have ever waded through so great a mass of matter, with so little pleasure or instruction; and nothing but the extreme importance of the subject, and the dangerous tendency of many of the doctrines inculcated in the present volume, could have led us to offer any animadversions upon it.

In the observations contained in the First Part, concerning the bad effects that result from the various and deficient education of regimental surgeons, the improper management of hospitals, and the necessity of a reform of these abuses, we find nothing which discovers much profound reflection of laborious research, or which can be ranked above common-place remark. To obviate the first of these evils, Dr Jackson, in imitation of some former projectors, suggests the propriety of instituting a Medical School, for the education of military surgeons, and, as the recruits assembled at the *Army-Dépot* in the Isle of Wight require a medical establishment, he thinks this school may be very conveniently placed there. The pupils admitted into the seminary must be of the age of twenty to twenty-three years, possessed of a liberal and classical education, and all the information necessary for the exercise of their profession in civil life, with unequivocal testimonies of a good moral conduct. After remaining for the space of twelve months in this institution, and acquiring, under the guidance of an able teacher, a thorough knowledge of the diseases most incident to armies in different climates and in different situations, and a sufficient acquaintance with the management of hospitals, they may be considered as qualified to become candidates for the commissions of assistant surgeons in regiments of the line. To the general plan of this establishment, we have little to object; but we should be inclined to oppose its foundation, on the same principle that Dr Jackson has censured the regulations of the Medical Board restricting the advancement of army surgeons, viz. that it would be extremely injurious to preclude deserving individuals from all possibility of serving in the medical department of the army, merely because they had not gone through a stated, though, perhaps, not necessary form of education. Indeed, we are at some loss to conjecture the reasons which led Dr Jackson to fix upon the Isle of Wight (a most sequestered spot) as the proper place

for such a school, or the motives which could induce him to propose that the superintendence of it, as well as of all military hospitals, should be confined to one medical chief; unless that Dr Jackson, from his extensive experience, deem himself the sole person endowed with the rare and superior qualifications requisite for these important offices. Of his mode of reasoning on this subject, the following quotations may serve as specimens.

“An army,” says Dr Jackson in his figurative language, “is an animated machine, consisting of many parts or instruments, of different degrees of power and importance, in a general purpose. It is organized upon a common principle; it is bound together by a common connexion; and it is moved by a common impulse: but, though so organized, so connected, and so moved, in its artificial arrangement, its different parts, which are perfect in themselves individually, are animated independently, and, in obeying their own laws of motion, are exposed to the action of a variety of causes, which have a tendency to derange or destroy their elementary existence.” (p. 2.)—“There is only one military chief in an army; there can only be one chief in an hospital, and he must be a medical one, for health is the object of hospital establishments, and the concerns of health cannot be supposed to be well understood, except by persons of the medical profession, and those of the most enlightened class.—The construction, therefore, of the medical machine, in order to be effective of its purposes, must hinge upon a simple principle; for deviation from simplicity leads to error, or produces non-effect.” p. 2-3.

Contrasting the arrangement of the foreign medical establishments with that of the British army, he observes,

“The Austrian hospital is regular in its movement as the duty of the military parade; and the efficiency of the organizing principle mechanically arranges new materials in their proper places, without confusion, and without loss of time.” p. 11.

To our minds, however, this regularity of operation and uniformity of practice appear to be the grand and fundamental defects of the system which Dr Jackson so warmly recommends, and to form the strongest arguments against the imitation of such a mode of proceeding. In fact, we can conceive nothing more prejudicial to the welfare of his patients, than the ‘habit of conduct mechanically correct,’ which he proposes for adoption in the management of hospitals. (p. 40.) Educated in the camp, and accustomed to the routine of military operations, Dr Jackson seems to think, that the various affections of the living system may be as easily disposed of as the different articles of a soldier’s equipment, and that, at the command of a medical chief, diseases should perform their evolutions, and arrange themselves in any order he is pleased to dictate; but sad experience,

experience, we believe, will inform him, that they are not always so submissive and obedient, but will often rise in mutiny, and dispute his most peremptory decisions.

The second division of the 'Remarks' is occupied with an account of the management of the hospital in the Isle of Wight, under the superintendence of the author. From this narrative it appears, that Dr Jackson, when he first became entrusted with the care of the sick in Packhurst barracks, judged it necessary, or expedient, to deviate from the plan generally pursued in similar situations. Thus he divided his patients into different classes according to their particular complaints; allotted to each class a separate ward; and, when they recovered to a certain degree, removed them to apartments destined solely for the reception of those in a convalescent state: if they suffered a relapse, he caused them to retrace their steps to their former apartments.—These regulations, to a certain extent, seem not improper; but we can by no means approve of the principle which led Dr Jackson to fix the diet of all the patients in the same ward at the same general standard; for it must be obvious to every one the least conversant with disease, that appetite does not always keep equal pace with the other symptoms of sickness or recovery, and that it varies very much according to the mode of life and constitution of the patient. Nor can we, after much serious consideration, discover the vast superiority of verbal instructions to written orders, with regard to the duties of hospital attendants. The following observations, connected with this subject, appear to border a little on the *ludicrous*.

'It is a duty of the medical chief to fan the sparks of affection as they shew themselves; to foster them with care, till they assume a good and steady growth. The growth, even among soldiers and *soldiers' wives*, is not reluctant, if tenderly nursed; but it does not thrive under harsh and rigorous treatment. The nurses and attendants of the sick, who possess sensibility of heart, are cordially engaged in their duties, by being confidentially treated, so as to be made, in some measure, a part of the medical establishment. If they possess confidence, their benevolence is warmed; they feel an interest in the fate of their charge; and participate all the anxieties, and all the pleasures of the physician.' p. 94.

These improvements or alterations in hospital practice, which Dr Jackson was desirous of having generally introduced, did not, however, meet with the approbation of those to whose consideration they were submitted. A considerable mortality had taken place among the soldiers in the Isle of Wight, towards the end of the year 1801; and some eye-witnesses of the mode of treatment followed by the author, thought it their duty to lay an account of it before the Army Board, who highly disap-

proved of it, attributing to it the great decline and loss of the troops under Dr Jackson's care: 'It appears,' they observe in a letter addressed to the Secretary at War, 'that Dr Jackson's mode of carrying on the Isle of Wight Hospital is an apparent saving of money; but at the Isle of Wight, and lately at Chatham, we have observed an unprecedented number of deaths, (viz. 27 in the last month, and 21 in the last two weeks), frequent relapses, and tedious recoveries, with a debilitated state of the patients; therefore, so far from economy being effected, there has been a very serious loss of men, and ultimately a great expenditure. These returns called upon us to recommend, that two physicians should be sent immediately to the Isle of Wight.'

To justify himself from these allegations, Dr Jackson endeavours to shew, that the great number of deaths among the soldiers arose from the malignant nature of the disorders with which they were affected; and the four physicians, who were deputed by the Medical Board to examine, and present a report of the state of Packhurst Hospital, seem disposed to refer them to the same cause, aggravated by the crowded state and foul air of the wards. Nor does this mortality appear to have been diminished under the physicians who succeeded Dr Jackson in the charge of Packhurst Hospital; but, on the contrary, very much increased; having been, from the 18th of July, to the 31st of December 1801 (the time of Dr Jackson's superintendence), in the proportion of 1 in 15½; while, from the 1st of January to the 30th April 1802, it was no less than 1 in 8. This difference, however, may have been owing to accidental circumstances, and cannot be regarded as attributable to neglect or improper management on the part of the physicians, to whom the care of the sick was entrusted after Dr Jackson's demission.

So far we think the author's vindication of himself plausible. Into the merits, however, of the remaining part of his apology we are not prepared to enter very fully, as the documents with which he has furnished us are too scanty and imperfect to enable us to form any decided opinion with regard to the justness of his cause. The specimens, however, which he has given us of his practice in the course of the 'Remarks,' and which he has developed at full length in the Appendix, call for the severest censure, and seem to justify almost completely the conduct of the Medical Board towards Dr Jackson. We agree with the late Dr McLaure (to whom the author seems to have had a very unjust antipathy) in deprecating 'the horrid system of depletion;' and we perused, with no small degree of terrible anxiety, the account given by Dr Jackson of a patient in the first stage of typhus fever, whom he bled at once to fifty-six ounces, and who, in three or four days, after the

the plentiful use of opium, hot and nourishing drinks, &c. was able to return to his duty ! This instance of bold and unprincipled proceeding, which is cited by the author with so much triumph, may serve to evince the great powers of nature, but can never form the criterion of rational practice or true professional skill. Similar considerations would lead us to disapprove of Dr Jackson's treatment of patients in a convalescent state. Imbued with all the prejudices of the humoral pathologists, he roundly asserts that relapse is the general consequence of repletion. Although we should be far from recommending the practice of gorging patients during recovery from disease, of forcing them to eat against their inclination, or allowing them, perhaps, to indulge so much in the use of stimulating drinks as they are often inclined ; yet nothing, surely, can be more injurious, than to stint convalescents in their allowance of generous diet, which, when freely exhibited, so manifestly tends to aid and accelerate their progress towards recovery. So little do we imagine relapse to be the consequence of repletion, that we believe it proceeds, in many cases, from a contrary cause ; as must be well known to those whose professional avocations have afforded them the means of knowing the health, and witnessing the mode of living, of the lower classes of society, among whom, chill penury, and its consequent inconveniences, are generally reckoned among the most common causes of the disorders to which they are so frequently liable.

The Appendix (to which we shall now direct our attention) occupies about one half of the volume, and adds one to the numerous instances we already possess of the futility of medical theories when founded on no just or rational *data*, but when merely the offspring of erroneous deduction or diseased imagination.—A predilection for vague and frivolous hypothesis has long been deemed the *opprobrium medicorum* ; and, indeed, if we examine the history of medicine from its first origin down to the present time, we shall behold little else than a succession of fanciful systems, founded on a few scattered observations, and erected, it would often appear, only to gratify the vanity of their projectors, and which have served little other purpose than to perpetuate the folly and absurdity of the times which gave them birth. The different symptoms of disease have been confounded, and its different stages blended together ; the variety of the primary and secondary action of remedies has been overlooked ; and a few insulated facts have been grasped at, as sufficient to explain all the phenomena of animated nature. In this country, however, where physical science has, of late, made such rapid advances, physicians now appear to have run into the opposite ex-

treme; and, from their anxiety to avoid those fatal errors of reasoning and practice, to which the speculations of too many medical theorists have given birth, have rejected, with disdain, and without discrimination, all attempts to generalize and improve the principles of medical science. Hence has arisen an opinion, that all theory in medicine was useless; or, at least, of little moment in a practical point of view; and that *experience* was the only guide in which a prudent physician would confide. This opinion we hold to be equally ill-founded and dangerous; for, whatever difference may exist between the slow deductions of experience and the more prompt conclusions of a theorising mind, there cannot be a doubt, that all legitimate generalisation must rest on the firm basis of observation and experiment. However much, then, we may reprobate the hasty assumption of those puerile hypotheses, to which we are so often referred for proofs of the inutility of theories in medicine, and which, when applied to practice, may undoubtedly prove the sources of pernicious error, we must, on the other hand, allow, that a fair and cautious induction of general principles may be of the highest utility in medical research, and by facilitating the acquisition of necessary knowledge, will give us a more ready and certain command over it when obtained, and enable us to accommodate our practical conduct to the different unforeseen occurrences that are constantly obtruded upon us in the exercise of our profession. Till, however, the rules of the Inductive philosophy be more fully understood and practised by physicians; till the science of physiology be improved, and the system of medical education reformed, we despair of seeing any extensive and successful adoption of general principles in medicine, for it cannot be expected, that mankind will ever be led to acknowledge their importance, till they become acquainted with all the circumstances necessary for their induction and application.

One other cause, which is, in some measure, connected with the former, and which powerfully retards the advancement of medical knowledge, deserves to be specified, viz. the vague and undetermined use of language, and the improper application of terms, borrowed from other sciences, to explain the phenomena of the animal economy in the various states of health and disease. Thus, the language of chemistry, of mechanics, of morals, and of metaphysics, has been successively adopted in medicine, without much regard to the propriety of the innovation, and with still less concern for the honour of the profession, and the general welfare of mankind. The author of the present work, however, not content with retracting many of the errors of his predecessors, has advanced a step beyond them, and, by a free and promiscuous use of those technical terms with which he was most familiarly

liarly acquainted, has framed a phraseology to describe the actions of the living system, which, in ridiculous absurdity, far eclipses all former attempts of a similar description, and bids defiance, in extravagance, to the rhapsodies of Paracelsus, or the reveries of the enthusiast Van Helmont. Of this jumble of theories, this mixture of languages and confusion of tongues, it is difficult to give any regular and precise account; for, in it, arts and sciences dance together in 'various circles of movement,' without any proper time, place, or measure, so as, at last, to produce the most confused, chaotic mass. A few extracts, perhaps, may accomplish what no analysis is adequate to, and serve to give our readers some distant idea of this curious jargon, which we hope will long remain *unique*.

When detailing the phenomena of febrile diseases, Dr Jackson's favourite expressions seem to be borrowed from the language of prosody, and through the whole of his Appendix our ears are stunned with an unceasing and unvarying ring upon the terms '*rhythm of movement*,' '*rhythmical movement*,' '*rule of harmony*,' &c. 'A certain rhythm of movement,' he says, 'is a condition inseparable from a living animal body; as the integrity of the order and force of that rhythm is the index of health. But as movement is an expression of the presence of life, and rhythmical movement an expression of health; so, the mode of health is liable to be perverted, the motions of the machine to be even finally arrested or annulled.' (p. 188.) Sometimes he assumes the airs of a dancing-master; and informs us, that, 'in health, a variety of operations are carried on in various circles of movement, under different figures or forms of action' (206.); and that 'a change in the rhythm of movement is the first visible step of action, or even supposable step of action, arising from the operation of the causes of fever.' (191.) Then he plays the part of a teacher of music; and, comparing the human body to the instruments of his profession, describes 'the scale of health,' 'the key of movement;' and shews us, that the movement of health, 'though various, is in unison in the parts and in the whole;' but that 'the modes in the scale of perverted rhythm, or diseased action, appear to be various, and the measure of the movement is different. In some it is rapid, in others it is slow' (206.); and 'that means, which tune to harmony in one case, loosen the cords of life in another.' Now he takes up the tools of the joiner, and frames debility into 'the primary hinge of action in febrile diseases' (190.), and bleeding into 'the cardinal hinge of medical means' (231.); or he borrows the brush and pallet of the painter, to portray 'the various shades,' 'the variety of configuration,' and 'the outlines of general character,' of disease. Again, he resorts to the terms of military art, ob-

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serving, that 'previous to restoring the natural harmony of movement, it is often necessary to arrest the irregular course of the existing motions, in order to bring back, with greater facility and certainty, the form of the rhythm which has been lost; in the same manner as it is often necessary to cause a military column to halt, when moving incorrectly, so that it may more easily lay hold of the regular cadence of the step' (230). And, finally, to crown this climax of absurdity, he calls to his aid the sciences of the bombardier, talks of the 'explosions' of the excitability of the system, and assures us, that in vitiated atmospheres 'febrile motions do not ordinarily explode with force' (199.); and that 'there is evidently a point of explosive revolution in the animal machine, connected with time; but not connected with it by a fixed and invariable law, as measured by the artificial hour' (231).

One passage more we shall take the liberty of subjoining, as affording a specimen of the author's happy talent for fine writing and elegant illustration.

'If the apparent debility of fevers be a proper specific action, and not the expression of the effect of a preceding operation, viz. the perverted or disturbed rhythm of movement, the event is totally inexplicable. Without supernatural aid, the machine must rest for ever; for debility stands here like a cart before the horse. In this position arose the *vis medicatrix nature*, like a fairy queen, to put the wheel in motion. The *vis medicatrix nature* is a loose term; but it is supposed to consist in a power given to the animal machine, not explicable by the common laws of its mechanism, to raise efforts to combat the action of the causes of diseases, and to avert their destructive tendency. It is thus a species of provisional power; and, as such, proceeding from wisdom which cannot err, it cannot be supposed to be otherwise than perfect.' p. 204-5.

The varieties and causes of fever naturally arrest our author's attention. With singular infelicity of language, he terms epidemic disease, when it assumes a malignant form, 'a manufacture from Nature's storehouse;' and conjectures, that 'when widely extended, it must be supposed to depend upon some hidden derangement in the materials of the earth,—on a movement of parts into new contact, giving out a new or unusual product' (221). The operation of contagion he seems to be of a stimulant nature, 'loosening, in an inexplicable manner, the hinges of organization' (p. 225). And here we find another instance of the want of systematic reasoning among physicians, who argue not from facts, but from the chimeras of their own imaginations; and, without taking the pains to examine whether the phenomena in question accord with their description, refer them indiscriminate-

ly to a System, admirable, without doubt, for the simplicity of its foundation, but deficient to an extreme in the erection and arrangement of the superstructure.

Among the remedies which Dr Jackson recommends for restoring 'the natural rhythm of movement,' are venescction, bathing, and gestation. Reasoning from the well known consequences of bleeding in cases of obstructed circulation, Dr Jackson, with an unparalleled degree of temerity, has inferred, that these were the general effects of the remedy; and, because the pulse was, in some cases, remarkably strengthened by evacuation, concluded, that its effects are stimulative. '—' The idea, that abstraction is directly and unqualifiedly debilitating, and addition the contrary, could only have arisen at the table of the feast. From thence it has borrowed all its illustrations.' (p. 235-6.) And in support of his reasoning, he, with much sagacity remarks, 'The abstraction of blood, by its express effect, diminishes the quantity of a body to be moved; and thereby increases the power of the mover: It thus facilitates motion' (p. 237). But can the Doctor be so ignorant of the laws of the animal economy, as not to know, that the stimulus which excites the heart and blood vessels to proper action, is the very substance which he abstracts, in order to rouse their energy; and although its removal certainly facilitates the due performance of the functions of the vascular system, when it forms congestions near to the centre of the circulation, yet this effect is to be explained in a much more simple way? But this infatuated adherent to the system of *plethora*, reasons where he should have observed; perverts the most obvious facts, in order to subject them to his own erroneous theory; and boldly recommends his rash pernicious practice to general and almost unlimited adoption. We know not in what circle the movements of Dr Jackson's ideas are performed, but we trust that 'some remedy exists in Nature's storehouse' for the cure of such mistaken judgment, and for warding off the fatal effects that would ensue, were his opinions universally received, and his example universally followed.

In his observations on the use of the cold and warm affusion in fever, Dr Jackson, with sentiments of envy, and a spirit of illiberality which we cannot sufficiently deprecate, endeavours to detract from the well-earned reputation of Dr Currie, and arrogates to himself the merit of having employed this efficacious remedy as early as the year 1774, although, he allows, 'the discoverers are not of this age or country.' Let Dr Jackson, however, remember, that, according to his own ingenuous confession, he went out to Jamaica in 1774, 'at an early period of life, and
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with only a small share of professional information ;' and that it was not till 1778, when he first visited America, in the capacity of assistant-surgeon, that 'some dawns of science' began to arise in his mind. If he employed the cold affusion so early as he pretends, the details of its effects do not, in all probability, redound very much to his credit ; and these he has accordingly very prudently suppressed. We know not what specific meaning Dr Jackson attaches to the words '*popular manner*, in which,' he says, 'the subject has been treated by Dr Currie of Liverpool ;' but we are acquainted with no book, in the whole range of medical literature, which combines, in a more eminent degree, soundness of argument with accuracy of observation and elegance of composition, than Dr Currie's '*Medical Reports*'—a work which we may safely recommend, with the precept '*nocturna versate manu, versate diurna*,' to all future medical writers and inquirers.

Were this the proper place, we might animadvert at some length on that invidious rage, which has led so many modern authors to exalt the ancients at the expence of their own more deserving contemporaries. We doubt not, that some obscure hints of the most remarkable discoveries, which mankind have hitherto effected, may be traced in the writings of the ancients, either by direct inference, or by implication ; but the authority of antiquity has long enough retarded the improvement of science ; and surely the moderns ought to have their due, who have perfected the half-formed arts of their predecessors, and reduced to a more rational system their crude and indigested information. It is not for the merit of the invention of the affusion of water in fever, that we commend Dr Currie, but for the excellent rules, which he has laid down for its application, by which means a powerful remedy becomes the most effectual method of cure, while, in unskilful hands, it would only tend to aggravate the disease.

But the fact is, that the credit of the invention was never claimed by Dr Currie, or by Dr Wright, who preceded him in its use, and to whom the former has fully acknowledged his obligations. It was used by the latter gentleman in his own case, during his passage from the West Indies in the year 1777 ; and an account of his cure was published by himself in the year 1786, at least, five years prior to the appearance of Dr Jackson's first publication on fever. Both these writers (Dr Currie and Dr Wright) have expressly stated, that the employment of cold water in fever was no new improvement of practice, but merely the revival of an ancient custom ; and in support of this assertion they have cited the works of many ancient and modern authors. These and other considerations render to us suspicious the account
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which Dr Jackson has given of his own practice and success with this remedy. One circumstance is somewhat remarkable, that, among the first modern adopters of the affusion in fever, Dr Jackson has (with no slight geographical inaccuracy) mentioned De Hahn as having used it at *Warsaw* in 1737. Now, Dr de Hahn is particularised by Dr Wright, as the employer of this remedy, at *Breslau*,* in his Essay published in the year 1786, to which Dr Jackson has made no reference, although he could not be, or ought not to have been, ignorant of its publication.

If, however, by any accident, it should happen that these two respectable writers entered the lists with Dr Jackson, we are convinced, that they would soon yield to him all the assumed merit of the practice, as he employs it. Instead of accounting for its operations on known and rational principles, he explains it by absurd illustration, and in his uncouth phraseology. Instead of deducing from experience the laws of its adoption and regulation, he recommends it at random, and in cases, where it must prove the harbinger of death, rather than the restorer of health. How much information, for instance, do we receive from the remark, that 'bathing, like every other power in nature, acts upon the excitability of organism, and produces, more obviously than most others, an effect upon organic movement!' (p. 269.) What depth of science do not the following reflections betray! 'A thermometer only measures absolute quantity; it gives no information on the subject of quality, whether of the kind consistent with life, or of the kind which indicates the presence of a process leading to disorganization and destruction,' (p. 273.) How absurd the vulgar idea, that cold-bathing produces an abstraction of caloric! But when Dr Jackson informs us, that it acts, 'by restoring the natural rhythm of movement in the organic structure, by the force of a new stimulus, it preserves a consistent, intelligible, and clear explanation throughout. (p. 276.) After such observations as these, we were not much surprised to find the principles which guided the author in the use of this remedy, undecisive and contradictory, or to learn that, in his hands, it had sometimes proved unsuccessful. To prepare his patients for the cold-bath, he vomits, purges, and bleeds profusely (so as to place 'the whole moving powers upon a ticklish balance,') employs the water as near the freezing point as possible, in the latest stages of the disease, however cold the skin, or however debilitated the patient!

In the latter part of the Appendix, the author lays claim to the merit of having first introduced a new remedy in fever, from which,

* London Medical Journal, VII. Part II. p. 109.

which, he asserts, much benefit may be derived, after all other medicines have failed, in accomplishing a cure; and which was first suggested to him by the good effects that resulted from a journey, which he was obliged to perform, in an open conveyance, when labouring under fever. It happened to rain heavily all the time he was upon the road, so that he was completely drenched; but at the end of the journey, he found himself considerably refreshed and invigorated. These effects he afterwards had an opportunity of seeing exemplified in a considerable portion of the sick of his regiment, when conveyed from one station to another, in the manner above described, and 'exposed to dews by night, to a scorching sun by day, and to occasional showers of rain.' Reasoning from these facts, the Doctor very gravely recommends, that patients in the last stage of fever should be carried, for the space of six or eight hours at a time, in open carts, over rough roads, through woods or lawns, and, at the same time, bled, soused with water, and bled again!

We shall now take leave of Dr Jackson and his *gestatory* plan of cure. Were his ideas likely to gain universal adoption, we should have entered much more fully into their refutation: but fortunately they are so enveloped in the obscurity of language, that only a select few can comprehend and measure their depth; although this very circumstance may prove a recommendation to some, whose intellects are placed in the same 'key of movement' with the author's, and who, possessing all his enthusiastic spirit, may be led to practise his rash and injudicious precepts.

ART. XIV. *Sermons.* By William Laurence Brown, D.D. Principal of Marischal College and University; Professor of Divinity, and Minister of Grey-Friar's Church, Aberdeen. Edinburgh and London. 8vo. pp. 491. 1803.

THE composition of sermons was one of the first exercises of the reviving literature of Christendom; and it has ever since supplied occupation to a greater number of authors than all the other departments of learning put together. The multitude of labourers, however, has not yet brought this field into so perfect a state of cultivation as might have been expected; and innumerable volumes have been published upon the same subjects, without fixing any unexceptionable standard for the distribution of the arguments, or the regulation of the style. Among the other obvious causes that concurred to retard the improvement of this branch of composition, we know that, in the Presbyterian churches,

churches, there formerly prevailed an opinion, that divine truths did not require the decorations of human eloquence, and that it was a sort of profanation to waste any care upon the manner, when the matter was of such awful importance. In those days of zeal and orthodoxy, however, the matter was seriously laboured; and if we are frequently offended with the slovenly style of our older preachers, we are almost as often delighted with the vigour of their reasonings, and the earnestness of their exhortations. Of late, our language has become sufficiently polished: and we are never disgusted with that kind of harshness, at least, which proceeds from conciseness or strength. Every thing is delivered, too, with the most exemplary coolness and moderation: the preacher retains a perfect command of himself throughout the whole performance, and never runs the risk of betraying his readers into any improper degree of emotion. Whether this change be owing to any general mollification of the clerical temperament, or only to the alteration of their taste, and whether we are to impute the prevailing character of our modern sermons to a defect of zeal and industry in their authors, or to a predilection for smooth and elegant phraseology, we do not presume to determine. It will be generally allowed, we believe, that those sermons are the best which unite the polish of the modern school with the strength and solidity of the old.

The volume before us, which, with a singular degree of liberality, is inscribed by a Presbyterian Professor of Divinity to the first dignitary of the Church of England, appears to us to be a very respectable attempt at the union of which we have been speaking. The discourses contain a greater portion of earnest and substantial reasoning than we have generally met with in similar publications; and the language throughout is pure, nervous, and harmonious. The subjects, which are almost entirely of a practical nature, appear to be judiciously selected, and the duties of which they treat are explained with perspicuity, and enforced with great earnestness and address.

The first sermon, which treats of 'the duty and character of a Christian preacher,' specifies, in the first place, the nature of the instructions which a preacher should deliver, and then delineates, in a very striking manner, the character which he should endeavour to maintain.

With regard to the first of these, the Doctor says, p. 5.
 — 'While we preach *Christ Jesus the Lord*, it is therefore absurd to suppose that we should be unmindful of the principles of natural religion, which are implied in the divine mission of the *Author and Finisher of our faith*, or that, in illustrating these, and enforcing moral duties, we preach not the Gospel of Christ. Consider how much of our Saviour's discourses, and of the epistles of his apostles, is employed in inculcating

culcating the purest principles of morality, and in preparing men for heaven by rendering them virtuous on earth; you will find that one principal object of the Gospel is to restore that image of God which had been defaced in the soul of man; to renew that purity of heart and rectitude of conduct of which the world had lost even the conception, and neither Pagan philosophers, nor Jewish prophets, had ever been able to produce the resemblance among their disciples.

'This very consideration, however, must constantly remind us of the infinite importance of the doctrines peculiar to Christianity, and of the distinctive and appropriate character of its precepts. When we reflect that, for our guilty race, the chief point is, not merely to be *informed*, but also to be *saved*, how fruitless, how vain, how devoid of comfort, are the most ingenious and accurate researches into the nature and attributes of the Supreme Being, and the relation which man bears to his Creator, unless they be accompanied with the positive assurance of pardon, and restored favour! How useless, how mortifying are the most beautiful precepts of morality, attended with the reflection that they only establish our guilt and degradation! When we tremble to look to eternity, how dismal is the certainty of a future state! These very informations and rules of life which, to creatures either innocent, or reconverted to their offended Creator, are productive of comfort and complacency, become, to those who feel themselves in a state of condemnation, subjects of aversion and terror. Is not the criminal more alarmed, when he is informed of the specific sanctions of the law which he has violated, and of the just and steady character of the Judge by whom he must be condemned?'

The duties of morality, enforced by the peculiar doctrines of the Gospel, ought certainly to be regarded by the Christian divine as entitled to occupy a very large proportion of his public discourses. We have been surprised at the senseless cry, which has sometimes been raised against preaching the duties of morality, as if morality were something opposed to the Gospel of Christ. The Scriptures assuredly contain a system of the purest morality, and no preacher discharges his duty who neglects to enforce it. At the same time, we equally agree with our author in the importance of the doctrines peculiar to Christianity. While it is of great moment to inculcate the duties of morality, they ought always to be inculcated on Christian principles. A Christian preacher should never conceal the peculiarities of Christianity, nor, in teaching men their duty, should he neglect the motives which his religion so amply furnishes. The difference between a minister of Christ and a disciple of Socrates, would not, in many cases, be so great in the conduct which they would recommend, as in the motives which they would suggest: here indeed the Christian has infinitely the advantage, and he ought to avail himself of it.

The second and third sermons are on 'the love of God,' and the joy and peace which result from believing and practising the Gospel.

Gospel. These two discourses illustrate some of the affections which religion commands us to cherish; and we are pleased to see a preacher of sound judgment engage in the discussion of topics which have been so often perverted by the unskilful. While judicious and acute men have sometimes explained the doctrines, and often inculcated the duties of religion, it has been left, too generally, to enthusiasts to describe religious affections and feelings. Few things, we believe, have tended more to the general discredit of religion, than that men of sound understandings should so often appear to discard all feeling from their system; and should have left it to be assumed as the peculiar property, and distinguishing characteristic of bigotted or designing men. When almost all the popular topics, and all the warmth and activity are found on one hand, and dry discussion conducted with a coolness, easily mistaken for indifference, on the other, is it surprising that the multitude should flock to the fanatics and enthusiasts? The enemies of religion, besides, avail themselves of this circumstance. they impute the irregularities of such men to religion itself, and allege the coolness of others as a proof of insincerity. If rational preachers would infuse a little more spirit into their discourses, and not treat their hearers quite so much as if they were beings of pure intellect, we are inclined to think that there would be fewer enthusiasts. Extremes produce extremes; immoderate zeal has led to indifference; and indifference has increased the zeal with which it is contrasted. The fanaticism which, at one time, prevailed in England, led the bulk of the clergy in that country into a studied coolness, which had all the appearance of indifference; and their coolness, in its turn, occasioned the unmeaning rant of the modern Methodists. There is some reason to apprehend that similar causes may produce similar effects in our own part of the island, where the people are not naturally inclined to any great excess of devotional ardour.

Religion has sometimes been represented as unfavourable to the enjoyment of life: in the following passages, this sentiment is refuted, and the superior excellence of religious joy maintained, with much justness, and with much eloquence.

So far is an implicit conformity to the dictates of our religion from being inconsistent with a proper care of worldly concerns, that, if we had no higher aim in view than merely to promote, or to secure, our temporal interests, we could hardly pursue a safer and more certain course, than a scrupulous observance of the rules prescribed by Christianity, for conducting us to future happiness. To increase or to preserve a fortune, what better means could we employ, than Christian diligence and honesty? To rise to preferment and honour, what so efficacious as that inflexible integrity, that cheerful and ready submission to lawful superiors, that affable condescension to inferiors, that meekness and

complaisance towards all, which the Gospel enjoins? To ensure good will, to maintain a character, to acquire reputation, could we adopt a better plan, than to cultivate Christian prudence and fortitude, joined with Christian rectitude and charity; or, as our Saviour beautifully and emphatically expresses it, than to be *wise as serpents, and harmless as doves*? In fine, if our sole object were to preserve health, to prolong life, or even to give a true relish to sensual enjoyment, could we follow any better course, than to practise Christian activity in business, in conjunction with Christian moderation and temperance?—‘These are joys pure and substantial, suited to the dignity of the rational nature, independent of our brutal part. These can never be carried to excess, never succeeded by corroding reflection. Pleasing once, they please and delight us for ever. Those, neither birth, nor external events, nor the dispositions of men, nor disease, nor age, can effect. They attend us in society, and forsake us not in solitude. When enemies persecute us, they inspire us with courage, and endue us with strength. When false friends abandon us, they remain. They solace adversity, and enhance and adorn prosperous circumstances. They lighten the burdens of life, and disarm death of his terrors! Compared with these, affluence is poor, grandeur is contemptible, sensual pleasure is disgusting. External circumstances are appropriated to no inherent dignity of character, and are often the means of debasing it. But religious and moral enjoyments are the peculiar privileges of the wise and good, who are not excluded from their share of worldly possessions, and can enjoy them with the highest relish. Still, should these be withheld, supported by their internal resources, by conscious integrity, by the exhilarating sense of the Divine favour, and by the glorious prospect of a blessed immortality, the piously wise must, even in adversity and affliction, be possessed of a more abundant store of happiness than can belong to the impious and the wicked, placed on the summit of power, basking in the sunshine of prosperity, and resounding the loudest strains of dissolute mirth. Like a rock lowering above the deep, the man of piety and virtue beholds the storms of calamity roar around him, without shaking his resolution, or impairing his strength. When the tempest assails those of a contrary character, they are tossed, like the sand, from surge to surge, and, when the calm returns, sink under the weight of their own depravity.’

Sermon fourth, ‘On the Nature, Causes, and Effects of Indifference with regard to Religion,’ was preached before the Society in Scotland for Propagating Christian Knowledge, and published originally at their desire. It is written in so masterly a manner, that if the learned author had published nothing more, it would have been enough to establish his character as no ordinary preacher. The nature of this indifference is distinguished with great precision, from moderation on the one hand, and the total want of religious principle on the other: the causes and effects of this spirit are traced with equal clearness; and several considerations

considerations added, which are well calculated to put Christians on their guard against it.

The fifth Sermon is 'on the Folly of Procrastination with regard to the Concerns of Religion;' the sixth is 'on the Vanity of Religion, unless considered as the chief good, and accompanied with Zeal and Perseverance;' the seventh is 'on the Nature, the Effects, and the Rewards, of Perseverance in Religion;' the eighth is on 'the Progressive Nature of Religion in the Soul.' The next three sermons are 'on the Specific Qualities of Prudence and Simplicity,' the union of these qualities, and the motives to cultivate them. On each of these topics the reader will find much useful matter, stated with accuracy and discrimination. Three discourses follow 'on Agur's Prayer,' in which the author describes the happiness of a mind open to the conviction of truth, and attached to duty, the temptations and dangers of opulence and exalted station, and the temptations and dangers of poverty, with the happiness of the middle condition. Some of these are subjects upon which declaimers have enlarged with peculiar complacency; and on the temptations and vices of the great and prosperous, many a lofty moralist has made himself popular at little cost. In these discourses, the dangers of opulence and of poverty are stated with equal impartiality, and in a manner judicious and manly, without any aid of fanciful embellishment.

In the next discourse, 'Pride' is very accurately distinguished from vanity, and from that becoming self-estimation which is often necessary to our protection from insult. The grounds of pride are examined in another discourse; and birth, titles, offices, riches, corporeal advantages, and mental endowments, are clearly shown to afford no sufficient reason for this temper. The next discourse is on the nature and effects of 'Humility,' which forms a very proper contrast to the subject of the two preceding sermons. The last sermon is on 'Charity,' and was preached before a Society instituted for the Relief of the Sick Poor. The text is, '*charity never faileth*;' and the author takes occasion to show, that while many gifts bestowed on men, and high attainments reached by them, shall cease with this life, charity shall continue and flourish in another state; and, from its unfailing nature, he powerfully urges the exercise of it. From considering the nature of charity in general, he easily passes to that exercise of it which consists in relieving the necessitous, and thus strongly recommends the interests of that Society for which he pleads.

'Ye who enjoy every convenience and comfort of life! to whom, when you are laid on a bed of sickness, every soothing aid, every help of medicine, every relief that money or tenderness can supply,

ply, are provided; reflect how you endured the pains and languors of disease, though mitigated and softened by all that human art or kindness could devise! Did you happen to be removed from your abode when some severe and dangerous malady assailed you, how were you overwhelmed by the absence of domestic charity and convenience? But the poor man has no home for sickness! Health is necessary to procure him ordinary comfort, is necessary to provide him and his family with the means of daily subsistence. *Laid on the bed of languishing*, perhaps on the bed of death, he beholds his wife and children disconsolate around him. They can present to him none of the cordials and supports of sickness; for his interrupted labour deprives them of the staff of life. His distress and theirs are unknown to the ear of opulence. The rich, or those who employ him, recognise him only by the price of his labour. When fixed to a sick-bed, which serves rather to augment than to alleviate his malady, he ceases to attend his work; he ceases also to be present to their minds. Another comes, occupies his place, receives the wages he used to earn—and the sick man is forgotten! Disease continues to prey upon his frame till he expires! He is consigned to the grave, of difficult purchase, and to oblivion; or is remembered only by the beggary of his family, often accounted importunate and troublesome!—But, do not you then rejoice, that a Society exists under the title of *The Sick Man's Friend*, whose object is to penetrate into the recesses of misery, to discover the sick poor, of whatever religious sect or party they may be, and to afford them every relief which charity can supply? Do you not rejoice, that, without encroaching on your ordinary business, abridging your pleasures, or diminishing in any perceptible degree your stores, you may heal or alleviate the diseases of your poorer brethren, by contributing a small portion of your superabundance? Will you not, then, command that portion to speed, under the management of faithful men, to the habitations of the poor and the diseased, to supply the strengthening cordial to the sick heart, to administer the cooling potion to the feverish frame, to mitigate the convulsive pangs of acute distemper, and even to smooth the bed of death?" p. 458.

In perusing some of these discourses, we have been disposed to wish that the inferior divisions or parts had been more distinctly marked. We have no desire to see a discourse split down into an intricate variety of divisions and subdivisions; this would generally be absurd, and could seldom be useful; but where topics, necessarily distinct, are introduced, it unquestionably rouses the attention, and assists the memory, to find them distinctly announced. In the ninth and tenth sermons, for example, the effects resulting from the union of prudence and simplicity, and the motives to cultivate them, are pointed out in a very masterly manner; yet, though several distinct topics are introduced under each of these heads, none of them is formally stated. This, we are persuaded,

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while it has no influence on the unity of the discourses, must diminish their impression. The unity of a discourse, is destroyed, we apprehend, by crowding a variety of subjects into it, and not by clearly distinguishing the different parts of the same subject. Fashion, we are aware, may perhaps be pleaded against us, though we believe Dr Brown would scorn to avail himself of such an authority; but we cannot permit fashion to decide against utility. She may be allowed to regulate the furniture of the circulating libraries; but it will be as well, perhaps, that she be not much consulted in the composition of sermons.

From the extracts which we have given, our readers may be able to judge with regard to the style of these discourses: it is well suited to the nature of the subjects, easy, flowing, and dignified; it never sinks to meanness; it is never turgid: the author states his sentiments with precision, and enforces them with animation; he never forgets the importance of his subject, nor suffers his reader to forget it; he always conceives clearly what he intends to express, and is never at a loss for appropriate expressions to convey his meaning. He has very much enriched his discourses by an abundant use of the language of Scripture, which he has applied with much felicity, and often employed to express his own sentiments, in a manner that gives much dignity to the style.

We cannot avoid observing, that too little attention appears to have been bestowed on the mechanical part of this publication, and that the author has suffered his compositions to meet the public eye under the disadvantage of many gross typographical errors. These we hope to see removed in a second edition; and, on a further revision of his work, Dr Brown will probably discover that these are not the only errors which require correction. Where there is so much to praise, we feel the more anxious for the purification of his style from those slighter faults and inaccuracies by which it is occasionally degraded; and we are fully confident that the exercise of his own taste will enable him to exhibit his work in a state still more unexceptionable.

ART. XV. *A Vindication of the Genuineness of the Ancient British Poems of Aneurin, Taliesin, Llywarch Hen, and Merdhin, with specimens of the Poems.* By Sharon Turner, F. A. S. London, Williams, Strand. 1803. 8vo. pp. 284.

THE predilection of the Welsh for the antiquities of their native country, and the jealous eye with which they still regard the interference of a *Saxon* in this sacred subject, are so notorious, that we are strongly inclined to indulge a suspicious smile at their allowing Mr Turner to anticipate themselves in vindicating the genuineness of their most ancient and favourite bards. No doubt can be entertained, that many of the Welsh antiquaries are infinitely superior in point of knowledge and zeal to Mr Turner: if, then, the cause which he has undertaken had, in their opinion, been tenable, can we suppose that they would have so long endured the scoffs of unbelievers, and at last have permitted a stranger to enter the lists, and bear off the prize? We are therefore reduced to the necessity of supposing that Mr Turner possesses zeal, without their knowledge and prudence. Although, however, the Welsh antiquaries have not come directly forward on this important occasion, yet one of the most distinguished of them has given his sanction to Mr Turner's work so directly and strongly, that they must share in his disgrace if he fail in his attempt, without being able to claim any of the honour if he succeed.*

Mr Turner need not have informed his readers, that he had applied only some part of the leisure of the summer to the consideration of this question; since the total want of arrangement, argument, and correct composition, sufficiently proves his work to have been a hasty performance. It has, indeed, many of the external marks of a methodical and logical treatise: the proposition is formally stated; the evidence is 'divided into two sorts, the external and the internal' (16.); and there are eight divisions, besides subdivisions without number, under each 'sort' of evidence. All this looks as if Mr Turner intended, when he began his work, that it should be clear, systematical, and full, even if he could not make it convincing or satisfactory. But he tasked himself beyond his powers. Some of the divisions, which are laid down in the beginning of his work, are entirely omitted in the elucidation of the evidence; and those which are noticed, occur in a very different order. This defect, however, we might have endured; or perhaps we might have endeavoured to remedy it by

* Owen's *Cambrian Biography*. Pref. p. 5.

by a different arrangement, if the matter had appeared worth the trouble. But we do not remember ever to have met with any thing dignified with the name of evidence, which bore so little resemblance to authority or argument. As we have neither time nor patience to examine, separately, the innumerable divisions of external and internal evidence, we shall select a few, and arrange them with more regard to method and order than Mr Turner has discovered. We shall not, however, insult the understandings of our readers, by entering into a formal and direct refutation; but, in some instances, shall merely state the substance of Mr Turner's evidence; and, in no instance, offer more than general remarks.

We shall begin with the proposition, that Aneurin, Taliesin, Llywarch Hen, and Merddin, were British bards, who lived in the sixth century; which is the sixth in the order of examination (109.), and the fourth in the order in which they are laid down in the beginning of the work (17). The testimony of Nennius is first adduced (115). Mr Turner observes, 'that Gale places him in the seventh century; he may have belonged to the ninth.' Now, the author of the history attributed to Nennius wrote, as he expressly informs us in his preface, in 858, * and consequently is very insufficient authority for the existence of bards in the sixth century. But, *secondly*, the passage alluded to is not in the printed copy: it is found only in one MS.; and the very style and contents of the whole chapter in which the passage occurs, prove it to have been the addition of a different, and, most probably, a later writer. And, *thirdly*, the passage, as it stands, mentions no bard but Taliesin: 'Item, Talhearn, Talanguen in poemate claruit, et Nuevin, & Taliesin, & Bluchbar, & Cian qui vocatur Gueinanguant, simul uno tempore in poemate Britannico floruerunt.' Hence, allowing that Nennius wrote in the seventh century, and that this passage is really genuine, still we must grant Mr Turner another favour before it can be of much advantage to him. By the assistance of Mr Evans he changes Nuevin into Aneurin, and Bluchbar into Llywarch. So that Mr Turner merely requests his reader to allow him to fix the æra of an author; to attribute to him, on the slight authority of one MS., a chapter not found in the other MSS., and very different in style and matter; and to alter the words as he pleases;—and then he undertakes to prove his proposition.

This is not the only instance in which Mr Turner has recourse to MSS. which have been rejected by the editors, whom, how-

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* Nennius apud Gale, I. 94. Nicholson, however, is inclined to place him in 828. Eng. Histor. Librar. p. 33. 3d Edit. fol.

ever, we must suppose to have been more impartial and competent judges than himself. In a MS. of the laws of Howel Dha, he finds some lines cited and ascribed to Taliesin: and these he brings forward in evidence, without stating on what grounds he considers this MS. as more correct and genuine than the others; and not in the least startled at meeting with a quotation from a poet in a book of laws,—and that quotation so little to the purpose, and so awkwardly introduced, that it bears every mark of an interpolation.

We imagine that the credibility of that notorious fabulist, Geoffrey of Monmouth, and the genuineness of the Welsh triads, ought to be established, before they can with any propriety be introduced as unexceptionable and satisfactory evidence. (119-135.)

We shall now turn back to the first division of the external evidence—that there are old MSS. existing of these poems, (21.); which merely amounts to this, that there are ‘two, if not three, ancient MSS. extant, which have no appearance of having been written later than the twelfth century,’ (24.) And this very guarded and very vague position does not rest on the authority of Mr Turner. He does not appear to have examined these MSS. himself; he does not even mention the qualifications or names of those to whose examination he has trusted; nor state the evidence which is supposed to prove their antiquity: He merely says, he understands (27.), he is informed (28.), he is assured (29.) that they are ancient. It is unnecessary to *expose* the weakness of this evidence. In pages 37-87, he endeavours to prove, that Aneurin, Taliesin, &c. and their works, ‘have been mentioned or alluded to by a series of bards, whose works still exist, undisputed, from before the twelfth century to a recent period.’ The disbelievers in the genuineness of the poems attributed to the bards of the sixth century, maintain, that they were forged in the twelfth century. They ground their opinion on two undisputed facts,—that the Welsh do not pretend to possess the works of any bards between the sixth and the eleventh or twelfth centuries, and that all the Welsh MSS. appear to have been written in the twelfth century. Mr Turner, imagining that the Welsh had unguardedly granted too much, contends (269), that there are small poems still extant, which were written in the seventh, eighth, and tenth centuries; but as he has offered no arguments in support of their genuineness, we must beg leave not only to object to them as authorities on the present subject, but also to suspect *their* antiquity. There are, however, six notices, ‘taken from poems which, according to the consent of the best Welsh critics, were written before the twelfth century.’ (37-

(37-39.) These notices prove, merely, that the names of Taliesin, Merdhin, Llywarch, Avaon, and Kenndyd, and short proverbial sentences attributed to them, floated on the breath of tradition; but by no means that their poems were then written, or even in existence. On the contrary, the very expression, 'Hast thou not *heard* what Llywarch sang—Greet kindly, though there be no acquaintance,' sufficiently points out what parts of the poems of this bard were preserved, and how they were preserved. The other notices are exactly of the same kind, and expressed in the same manner.

It is now necessary to turn from the 39th to the 112th page, where, in perfect consistency with the total want of arrangement of the work, the remaining part of this division of the external evidence is considered. Giraldus Cambrensis is cited; and his evidence is said to be complete and decisive. In one passage, he expressly says, that, in the twelfth century, the Cambrian bards, and singers or reciters, have the genealogy of their princes written in their ancient and authentic books in Welsh. The poems of the bards are not mentioned; yet Mr Turner affirms that 'he speaks of the genealogies but as a *part* of the contents of these ancient and authentic books.' In the other passage, the words of Giraldus are, 'Rex Angliæ Henricus Secundus, sicut ab historico cantore Britone audiverat antiquo.'—Mr Turner hence infers, 'that the ancient British had historical singers, that is, ancient bards who had left historical poems, which, in the days of Henry the Second, were deemed ancient, and referred to; and which, therefore, must have been some centuries old in that age.' (144.) Cannot Mr Turner perceive that the words expressly declare, that King Henry had *heard* (concerning Arthur), from an *ancient British bard*?

After these specimens of Mr Turner's commentary and arguments, which are not selected, and are even surpassed in almost every page, it surely is not necessary to examine, or even state any other passages, which he has adduced in support of this part of the external evidence. We may, however, remark, that the entire silence of Giraldus Cambrensis, a writer who is so very full and particular in every thing relative to Wales, and seems to have possessed considerable knowledge as well as zeal, renders it extremely probable, that in his time (about 1200) there were no poems of an ancient date; either traditional or written. In one passage, indeed, he refers to the prophecies of Merdhin, and declares that he had translated them into Latin. But Mr Turner considers the prophetic works ascribed to Merdhin, which have come down to us, as unquestionably either interpolated or surreptitious, (140.) How then can this passage of Giraldus prove the

the existence of the genuine poems of Merdhin in the twelfth century; or apply, with any propriety or force, to the only poem of this bard, at present allowed to be genuine, the Aval-lenau, which the historian never mentions?

In p. 197, Mr Turner maintains that the obscure and unintelligible passages, which abound in the poems of Taliesin, &c. are a strong presumptive evidence that they are genuine. If Mr Turner will turn back to page 164, he will there find, that he leaves to 'its fate' the mystical, unintelligible poetry of Taliesin, and considers as genuine only his historical elegies, and his poems on Urien and Elphin! In other words, he gives up the defence of those which bear the most unequivocal marks of antiquity, and selects, as genuine, only those which, according to his own criterion, are destitute of them.

In page 196, he affirms that the Britons had the use of letters in the sixth century. It is evident that, unless by this he meant that the Welsh was a written language at that period, he will have gained nothing by proving his point. But, so far from having been able to substantiate what he must have meant, he has not adduced even the shadow of an argument in support of what he has actually said. Several Latin inscriptions (of which, however, he notices only two, both the work of one man) have been found in Wales, of the date of the sixth century. How totally destitute of judgment must that man be, who can from this circumstance infer, that the Britons had the use of letters at that era, or that, because a Welsh ecclesiastic could then write Latin, therefore the Welsh was a written language!—It may be observed that, according to the very nature of the Bardic system, it would neither be necessary nor desirable, that their poems should be committed to writing; and, in all probability, *they were not*, till the profession became less numerous, when it would be necessary to preserve in writing, what recitation or tradition could no longer sufficiently spread or secure from oblivion.* On the contrary, the laws of a country would present the strongest claim to be first committed to written language; and accordingly, the oldest indisputably genuine work in Welsh, is Howel Dha's Laws, of the tenth century.

We shall now proceed to consider some parts of the internal evidence produced by Mr Turner: and here, the same confusion and imbecillity of understanding are discovered. The mind of the reader is never exercised, even in detecting sophistry; but
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* Mr Turner himself informs us (History of the Anglo-Saxons, I. 196.) that, 'the bardic doctrines, were orally communicated from bard to bard.'

is perpetually wearied in arranging and unravelling, what, after all the labour bestowed upon it, is always devoid of ingenuity, and sometimes even inconsistent with itself.

One of his most forcible arguments is, 'that the subjects of these ancient poems were the most unlikely of all others for a forger to have chosen' (153). These poems, in general, record the defeats of the Britons. This very circumstance Mr Turner, by a strange perversion of intellect, considers as a proof that they were written by bards who lived at the time of these defeats: whereas, most of his readers, we imagine, will consider it as a strong presumptive proof that they were written six centuries after these defeats, and not at the very period in which they happened. Mr Turner is of opinion that a forger would not have chosen the disasters and subjugation of his countrymen for the subjects of his poems: But what other subjects could he consistently have chosen, if he wished his poems to be attributed to bards in the sixth century, at which period it was well known to the contemporaries of the forger, that the bards, if they sung of battles, must have recorded the disgrace and disasters of the Britons?—The manner in which Arthur is spoken of in these ancient poems, Mr Turner considers as another proof, that they could not have been written in the twelfth century. According to Mr Turner's own account, it was in the twelfth century that Arthur's fame acquired a 'gigantic shape;' and he seems to consider the history of Geoffrey as having first given it this magnitude. Hence, in direct opposition to Mr Turner, we would infer, that a forger, of the least skill or knowledge, would not represent Arthur, in poems which he wished to be attributed to the sixth century, as that romantic and fabulous character, which he was not supposed to have been, till the publication of Geoffrey's history;

Among other 'traits of genuineness' in these poems, on which Mr Turner descants for thirty pages, without ever betraying any mark of ingenuity, there is one which we do not hesitate to consider as a strong 'trait' of forgery. Merdhin, according to the Welsh traditions, was subject to fits of insanity during the latter part of his life; and, while he was in that situation, he is said to have composed his *Avallenau*. 'He retired into a Caledonian wood, in which, at lucid intervals, he explored his misery.'* We shall pass over the improbability, that such a madman would amuse himself with composing poems; and the much greater improbability, that if he did compose poems in this Caledonian wood, and uttered them in the hearing

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* Turner's *Anglo-Saxons*, I. 205.

of any persons, they would think the ravings of a madman worthy of being committed to memory.—We shall even suppose, that these circumstances did take place; or that Merdhin, in his lucid intervals, came out of his retirement, and wrote his poems: Surely even Mr Turner's credulity will not desire more from us.—Let us now consider the 'trait of genuineness.'—In Merdhin's *Avallenan*, there is also much display of natural feelings appropriate to his character. The allusion to his insanity is interesting:

' I myself am a wild horrible screamer—
I am pierced with horrors—I am
Covered by no raiment ! ' p. 192.

We merely ask, is it in the least consistent with the known character of madmen, that they should, in their lucid intervals, speak of their calamity? Does not this very passage, at least, render it very probable that the poem is a forgery? It is much more likely that a forger should be so forgetful, or so ignorant of human nature, as to introduce this passage, than that Merdhin should differ so essentially from all others in his situation.

When we first read over the divisions of the internal evidence, we were particularly struck with the sixth—'That the historical allusions of the Welsh bards are true.' After having seen in what manner Mr Turner treated the other divisions, our curiosity was excited to examine this important position, which certainly affords opportunity for considerable ingenuity and research. But there is not even the semblance of either. At the same time, we return our thanks to Mr Turner for his conciseness, and for having given his proof so nearly in a syllogistic form, that, by simply stating the substance of it exactly in that form, we can save our readers from the trouble of following us through a tedious exposition of its weakness.

' Geoffrey is esteemed by the world a "fabler:"

But the Welsh bards are very unlike Geoffrey, and sometimes contradict him:

Therefore, the poems of the Welsh bards are genuine and authentic' (199).

The entire silence of the *Saxon Chronicle* respecting all the battles recorded by the Welsh bards, especially the battle of *Cattereth*, which is represented, in the *Gododin*, as having been so extremely fatal to the Britons, that of the three hundred and sixty-three nobles who were engaged, only three survived it,—and the mention, in that *Chronicle*, of battles not nearly so destructive or disgraceful to the Britons, which were fought in the same century, present a formidable objection to the genuineness of the poems, which Mr Turner has not even noticed.

In p. 250, Mr Turner considers the ‘chief objections urged against these poems.’ It is not our intention to examine his replies separately or minutely.* With regard to the first objection, ‘that rime was not known to Europe in the sixth century, and therefore these rimed Welsh poems could not have been composed at that period,’ we never considered it as decisive, or even very formidable; since rime may have existed in the Welsh some centuries before it had been attempted in other languages, especially in the languages of those nations which were unconnected with the Welsh. Mr Turner, however, has enumerated eleven authors, between the sixth century and the ninth, in whose writings rime occurs; and has traced it back even to St Austin, in the fourth century. If the objection from the use of rime by the Welsh bards be stated in another form, we think it would be much more powerful. There are extant two poems in the Anglo-Saxon; one written by Cædmon, in the seventh century; the other anonymous, composed in the tenth, on the battle of Brunanburgh; † neither of which exhibits any appearance

* We have carefully examined Mr Turner's two essays on the early use of the rime in the *Archæologia*, (vol. XIV. 168-204.), to which he refers, p. 251. They confirm the opinion, that rime originated with the monks; and that it was transferred from their Latin poems into the modern languages. If the Latin borrowed it from the Gothic or Celtic, as Mr Turner supposes, how shall we account for its existence in the Latin poems of Aldheim, A. D. 700, an Anglo-Saxon bishop; whereas, two centuries afterwards, it is not found in the song, written in the vernacular tongue, on a popular subject, the Battle of Brunanburgh? It is so extremely difficult to avoid rime in the Latin language, from the numerous corresponding terminations of its nouns and verbs, that, instead of considering the few instances produced by Mr Turner in his second essay, as intentional, we are astonished at the extreme care which the classical writer must have taken to prevent the frequent recurrence of rime. But, as the monks were utterly devoid of taste, and excessively indolent, they would consider the facility of riming, which the Latin language presented to them, as a beauty and an advantage; and accordingly substitute it, instead of inversion and metrical feet. The rimes, of which modern languages are susceptible, are comparatively so few, that it is very improbable that this mode of composition originated in them. They are continued in modern languages, not, as Mr Turner maintains, because they are natural to them, but because they produce greater satisfaction from being less easy and obvious. *Laing's Scotland*, I. 525.

† There are three copies of Cædmon's poem—in Hickes' *Thesaur.* I. 197.—Whelock's *Anglo-Saxon Bede*, p. 597.—and in Wanley's *Antiq.*

appearance of rime. Now, as the use of rime must have greatly facilitated the remembrance of the latter poem, which evidently appears to have been composed for the purpose of being committed to memory, at a time when few could write or read; it is extremely probable, that if rime had been so long and generally in use among their neighbours the Welsh, the Anglo-Saxons would have adopted it in their poetry, especially where the subject and the intention of the poems were the same in both languages.

Mr Turner has clearly proved that Giraldus Cambrensis expressly mentions rimed songs in the twelfth century, in the very passage which has been produced to show that he was not acquainted with rime. In 'cantilenis rhythmicis et dictamine tam subtiles inveniuntur,' &c. *rhythmicis* is evidently the adjective agreeing with *cantilenis*, and not a substantive; and, even if it be considered as a substantive, it will not bear the meaning which the objector has given it, since it never signifies 'verses.'

Mr Turner replies to the objection, that no poems occur between the sixth and the twelfth century, 1. By taking for granted the genuineness of poems attributed to the intermediate centuries: 2. By proving, principally from the suspicious testimony of the Welsh triads, that bards existed during that period: and, 3. By illustrating, at great length, the *profound* and *original* observation, 'that the ravages of time are capricious, and that similar chasms occur in the literary history of other countries' (269). We apprehend, that the simple statement of such modes of proof, is a sufficient exposition of their weakness.

Of the style of this work we should have said nothing, if Mr Turner had not rendered it necessary, by holding it forth as a proof of his 'reformation,' in this respect, since he wrote his history. He exhibits the same kind of reformation, of which that man might boast who should throw off his gaudy and fantastic dress, and appear before the public covered with rags, and bespattered with dirt. Most people, we imagine, would prefer his former mode of exhibiting himself; as it would, at least, be the source of occasional amusement; whereas his reformed dress could only sicken and disgust. We 'submit,' therefore, (to use a favourite expression of our author's), that when he again appears before the public, he should resume his former style; since, of the two evils, to one of which his readers must be exposed, they would certainly consider it as the least offensive.

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Antiq. Liter. Septen. p. 287. The poem on the battle of Brunanburgh, is given by Gibson in his Saxon Chronicle, and by Johnstone in his Antiq. Cælo-Scandicæ.

ART. XVI. *Travels through France, Turkey, and Hungary, in 1792; to which are added, Several Tours in Hungary, in 1799 and 1800. In a Series of Letters to his Sister in England.* By William Hunter, Esq. of the Inner-Temple. Third edition. 2 vol. 8vo. pp. 987. London. White. 1803.

THERE are some departments of literature which require greater exertions than are necessary for the mere composition of the works that belong to them. Of this description are voyages and travels; not to mention the walks of experimental philosophy. The author of a very indifferent book upon any of these subjects, may be entitled to a great portion of applause for the actions which he has performed; and it may even happen that considerable praise is due to the active exertions which the traveller or experimentalist has made, although neither important discoveries nor interesting writings should be the result of his labours. The various difficulties which must be surmounted before any long journey or course of experiments can be performed, are certainly deserving of our notice, to whatever termination the path may lead; yet mankind judge only by the event, and leave out of the calculation every thing which belongs in common to the efforts of the successful and the unfortunate candidate for fame. It has been alleged, therefore, that the business of criticism is to award this due tribute of approbation even to the less happy adventurer, and to moderate the usual tone of strict impartiality in favour of a department never likely to be overstocked with competitors. We are decidedly of opinion, that such a bounty would be in the highest degree improper; that it would tend directly to the discouragement of the respectable trader, by confounding the distinction between good and bad wares; that the more strictly merit is measured by success, and rewards proportioned to merit, the greater will be the competition for the prize, and the higher the value of the work.

But although such considerations induce us to think that no relaxation whatever of critical severity should be granted to this department of literary labour, we conceive that the peculiarities above mentioned authorise us to treat it with some favour of another kind. We are of opinion, that books of travels deserve a greater degree of attention, in proportion to their merits, than other works of more ordinary and easier composition; and we have, therefore, during the course of our undertaking, been disposed to relax in their favour that strict rule of selection, which has been our guide in some other branches of literature. Unhappily, we have hitherto found very little room for bestowing any further marks of admiration on the writings in question:

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and our review of the volumes now before us, will furnish at once a proof of our eagerness to find out something worthy of notice in this favourite line of exertion, and a new instance of most unmingled disappointment. Thus much it was necessary to premise, as an apology for making such a work the subject of an article.

The letters of Mr William Hunter to his sister Eliza, exceed, in a considerable degree, the average dulness of this popular species of composition, even if we include in our estimate the manuscript specimens which it has been our lot to peruse. The two or three first epistles are quite sufficient to correct any hopes of amusement which the reader of the title-page may unwarily have formed. He soon sinks into a kind of unvaried reverie, like that produced by the constant and uniform repetition of any heavy sound;—in this he is not even disturbed by any very striking discord;—he continues turning over page after page, to the number of near a thousand, without finding a single interruption of his repose. The author is a safe and smooth goer; he avoids giving the smallest variety either of pleasure or pain; he maintains this happy medium with inimitable dexterity; and, after the lapse of a certain time, the reader finds himself happily arrived at the end of his *journey*, without the recollection even of a jolt which might remind him of the task he has performed. Such, at least, was the unruffled state of mind in which we first passed over this work; all our efforts of critical vigilance could only ward off total sleep. In spite of our utmost attention, we could not avoid that minor sort of trance into which Mr Hunter has the secret of plunging his victims; and we gave way, after some ineffectual struggles, to the uncommon powers of this most skilful magnetiser. Our curiosity was, however, not unnaturally excited to discover the mysterious charm which he so evidently was in possession of. We therefore submitted once more to his operations; and are now so far acquainted with the secret of his art, that we can venture to disclose it with some confidence, both for the benefit of future authors and for the warning of our readers.

And, first of all, the practitioner of this new art finds it proper to obtain a due portion of customers. For this end, it is fitting that he should entice the passenger by his sign post; and as it is of the very nature of signs to have no sort of resemblance to the thing signified, so he depicts, on the outset, not the fare which the passenger shall find within, but that which may tempt him most readily to enter. Thus, as the head of the Grand Turk, and, still more, the words '*neat wines*,' are in no wise descriptive of the liquors which such devices are meant to represent, so is the name of Mr Hunter's article very far distant from convey-

ing any foretaste of its true nature or object. The unwary passenger sees written, in great characters, 'Travels in France during the heat of the Revolution, &c. with a head of the Grand Seignior; he buys; and straightway begins to turn over a few leaves. Lest, however, the deception should too suddenly be perceived, and the drug not taken in a sufficient dose, it is covered over with such devices as the following—which excite a little attention by the obscurity of their meaning, or at least tend to keep up the appearance.

'I do not propose to bind myself down by any fixed rules. My digressions will probably be numerous; and, as my inclination prompts me, I may yield to the dictates of reason, or indulge in the speculations of conjecture, or be seduced by the allurements of imagination. If this plan be desultory, I have only sketched it out, because I conceive that it will afford you more entertainment than any other; for there is an irresistible chain in variety, which carries the feelings lightly along'—and so forth.' 1. 3.

By such means the reader is enticed, and submits himself to the farther operations of the spell, which very speedily begin to be felt.

The great secret of Mr Hunter's art consists in avoiding every thing which may in the smallest degree disturb the repose of his reader by exciting emotions of any sort; and this he chiefly accomplishes, by curiously selecting all those incidents which are of the most ordinary recurrence, mixing them up with such remarks as are equally plain, and interspersing them with long discussions, to prove what is either intuitively true, or intuitively false; thus, in both cases, contriving to render any exertion of intellect as unnecessary in us, as it would be impossible in him. For these ends, he justly considers that the most familiar actions of a man's life are eating and sleeping at the stated times; and that when a person travels, the most ordinary occupation is that of moving from one place to another; setting off at a certain hour of the morning, and arriving at a particular hour in the evening; and, it may be, paying the expence incurred. Extending somewhat further his views of human affairs, he finds that provisions are either good, or bad, or indifferent; that the same general observation applies also to beds; and that all these objects may likewise be distinguished by another principle of classification derived from attending to their prices. From this view of the subject, the transition is easy to roads and ferries, including tolls and bridges, with the accessory matter of horses and carriages. The same love of generalizing, leads him to a contemplation of the works of nature; and he surveys, with an accurate and discriminating eye, the whole state of the wea-

ther, which, like the inns and roads, is remarkable for being sometimes better, and sometimes worse. And these are the main incidents of this excellent writer.

In the choice of his remarks and disquisitions, he is equally judicious: they are indeed of a touching simplicity; they are constantly introduced, lest the uniformity of the narrative might dispose us to wander entirely from the page; and are delivered in language so monotonously resembling their meaning, (when they chance to have any), that, in very truth, the sound may be called an echo to the sense. In the extension of this branch of his work, Mr Hunter proceeds upon one fundamental principle, of a most universal application—that the self-evident truth of any proposition is no reason why it should be either suppressed or assumed, but that, on the contrary, it should, on this precise ground, be often repeated, supported by numberless arguments, and enforced by much declamation; rightly judging, that so invaluable a treasure as plain truth can never be too strongly guarded, or too warmly celebrated. It would be endless to collect specimens of the felicity with which this principle is followed out in all its ramifications; it forms, indeed, the cement of the whole work—the *callida junctura* by which all the parts are held together—and so smoothed as not to ruffle the most irritable and active of readers. In justice to Mr Hunter, we shall cull a few samples. How convincing are his arguments to show that it is wrong to plunder a shipwrecked mariner!

‘To take advantage,’ saith he, ‘of a man who is an unequal opponent, is the act of a coward; but to strip of what little he still possesses; the unfortunate being who throws himself on your mercy, who implores your assistance, and whose life and fortune might be rescued by a trifling exertion of charity, is a conduct so much at variance with the common feelings of nature, that we are at a loss how to account for such barbarous and complicated depravity. Why is the law,’ &c. &c. (I. 142.)

By topics, no less judiciously selected, does the master prove, that a tale of complicated ‘villany and persecution’ creates ‘emotions of horror and indignation.’—‘A propensity to hate our enemies,’ he remarks, ‘and to avenge the wrongs they have inflicted on us, is a principle which is coeval with the instinctive feelings of the human frame.’ The perception of this truth suddenly transports him; he is rapt in the fervour of inspiration; and gives loose to the burstings of his heart—‘It has an eternal basis in nature, and prevails throughout the extent of the animal creation. It is a fundamental law, which is universally established in the breast, and is neither to be sub-
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verted by sophistry, nor invalidated by persuasion, nor extirpated by power.' (I. 353-4.) Whoever would be convinced that fighting against one's country is criminal, and that a bloody field of battle is a dismal object, may be accommodated with the proper arguments by turning to pages 379, and 383, of the first volume. A long investigation is undertaken, in two whole pages (391-2.), to show that cheating at cards is improper; and after much reasoning, we are gently led to the conclusion, that, 'those whose sentiments of honour are so relaxed, as to allow them, without repugnance, to cheat at cards, must be of a mean and sordid disposition.' The following remark on human nature is of the most general kind, and evidently flows from what is called 'a sensible man.'—'Such is the folly and fallibility, or the perverseness and obduracy of human nature, that the most sacred obligations are very frequently either openly infringed, or artfully evaded, when they are repugnant to our ideas of happiness, or inconsistent with our views of pleasure, convenience, or profit.' (II. 72.)—If any one has occasion for a sermon upon losses sustained by fire, or homilies proper to dissuade the Turks from using wine, and the dervises from leading irregular lives, or lectures against the use of stays, he may be conveniently supplied at p. 4. 72. 78. and 102. of vol. II.—We extract the following brief and elegant definition of comfort: 'Comfort gladdens and warms the heart wherever it is found; it is the animating spring of social life; and in proportion as it is diffused, is our satisfaction in beholding it increased.' (II. 150.) After a large dissertation on matrimony, Mr Hunter takes occasion to inform us, that he is 'convinced that private virtue is the only solid basis of public happiness and prosperity; and that the religion, the morality, and the freedom of a state, derive, in no small degree, both their origin and protection from the purity of domestic life.' (II. 216.) We cannot help regarding it as rather a singular deviation from his usual plan, that he does not explain at length the reasons on which so very strange an opinion is founded.

The plain downright falsehood of some positions illustrated in these volumes, is as remarkable as the self-evident truth of others: in no case is any thing left to doubt or ingenuity. While, at one time, we are reasoned into a conviction, that it is more agreeable to gaze upon young and beautiful girls, than on the old and the ugly; at another we are desired to believe, on the evidence of the author's own observation, that the scarcity in 1801 was entirely fictitious, and that the arts of monopolists must for the future be checked by legislative interference, otherwise the country will be starved, (II. 130.) Page after

page is filled with demonstrations that there is something improper in despotism, and something unhappy in the situation of a tyrant. Then we are told, that a great capital 'drains a country of its wealth and provisions,' (II. 185.) Sometimes the description of a district is, that its produce consists either of animals, vegetables, or minerals; and sometimes we have a museum mentioned, as containing 'minerals, fossils, spars, petrifications, marbles, opals, shells, metals, and volcanic productions,' (II. 197.) But none of Mr Hunter's feats of skill gives his reader less trouble than the argument to prove that the public revenue should be augmented by an open and avowed increase in the denomination of the coin; for such we conceive to be the meaning of the following dissertation:

'These mines bring in a considerable revenue to the Crown, by which the chief part of their produce is purchased. Copper simply refined fetches thirty-six florins a cwt.; and, when manufactured into bars and plates, about forty-eight. But the most lucrative use to which it is applied by the government is converting it into coin, as by this operation, one cwt., which costs originally thirty-six florins, yields about eighty in money, leaving a profit of 44 per cent.* This, to be sure, is not clear gain, as the expences of coinage must be deducted; but these are comparatively trifling.' Such immense advantages might furnish a hint to our own government,' &c. (II. 271.)

By a careful adherence to this method of composition, and more especially by a frequent introduction of his own concerns and feelings, Mr Hunter has happily attained the perfection of the *sedative art* in writing. But as it is not the object of this art, entirely to lull the reader, and still less to risk his suddenly shutting the book, whereby the spell would at once be dissolved, the skilful practitioner well knows how to excite from time to time a most gentle titillation of curiosity or hope, never indeed to be gratified, but just sufficient to maintain a slight degree of attention, and to continue the exercise of his power—as the magnetizer renders his subject obedient, and keeps up the trance, without permitting him either to sleep or awake, by tickling his nerves in a certain small degree at proper periods of the operation. In this branch of the art, Mr Hunter mainly excels. The travels of an Englishman, according to immemorial usage, begin with a storm in the Channel. Now, Mr Hunter's storm, in which he 'one moment rides on a boisterous wave, the next bumps on an inhospitable rock' (I. 8.), might peradventure have brought

* The whole of the blunder here is indeed *arithmetical*; but one part of it is still more palpably so than the rest; for the alleged profit should be above 222 per cent. instead of 44.

brought the reader's repose to a premature end, had he not, with wonderful adroitness, made use of the tickling process, and promised an 'anecdote of a lusty gentleman.' This proves to be, that the person in question swore a little because he was dropped into the water; that his oaths were in English, he not understanding French; and that, having nobody to carry him, he walked ashore on foot. Thus the titillation is allayed, without having been productive of the slightest gratification to disturb our repose. The same process is very often repeated, especially at Paris and Constantinople; and in no part of the route more frequently than in the unexplored country of Hungary, and the military frontiers of the two emperors. Sometimes he avails himself dexterously of the influence of association; and by commencing a sketch with the same lines by which a celebrated master has formerly portrayed it, leads us to expect a continued resemblance of the picture. It must be admitted, however, that he is apt occasionally to mingle a little disappointment, by the sudden transition; as, for example, in the following instance:

'The poor Queen of France, so lately an object of envy! Who can reflect on her sudden reverse of fortune, on her unmerited sufferings, on the savage insults to which she has been exposed, without being struck with that entire change of sentiment and opinion, which at present agitates and directs the minds of this fickle people? Those who once idolized the charms of beauty, and the pomp of royalty, are now become their bitterest persecutors. The age of chivalry is, indeed, gone with *them*, and with it all those nilder and more rational virtues by which it was supplanted. Chivalry was an enthusiasm, which, as it espoused the cause and asserted the rights of unprotected innocence and female youth and beauty, was highly serviceable to the state of society under which it prevailed. It sprang—with a good deal more to the same purpose, vol. I. p 32-3-4.

As our duty enjoins strict impartiality, we cannot avoid hinting to Mr Hunter, that this forms some deviation from the ordinary harmlessness of his prose, and ought, in future editions, to be placed at a greater distance from the beginning, that the reader may first be well dozed before so trying an experiment is made upon his temper.

The general music of Mr Hunter's language is intended, for similar reasons, to resemble that of Dr Johnson. The likeness between the two styles is indeed pretty exact, unless that Mr Hunter's has not the sense, nor the variety, nor the justness of his model; so that he has, we apprehend, produced such a parody, as the memorable 'song by a person of quality' is of a song by a poet. To which may be added, that he has borrowed somewhat from a female authority, of a more impure age, the eloquent Mrs Malaprop—using, after her example, such

doubtful forms of speech, as *errant* for *arrant*, (II. 99.); *suit* for *suite*; *interchange* for *change*, (II. 436.); *alternately* for *at once*, (I. 407.):—and betraying, moreover, a taste in grammar somewhat suspicious, as ‘women sent *in presents*,’ (I. 295.); ‘majority, clergy, number, &c. *is*,’ (passim); ‘enemy *are*’ (I. viii.); ‘after *we*’ (II. 50.) In gratitude to Mr Hunter, we farther recommend, that if he should at any time have occasion again to describe the extreme of ‘*impossibility*,’ he would not make choice of a figure which denotes *possibility*, and indeed alludes to a circumstance of hourly occurrence. In vol. II. p. 5. he talks of something being ‘as impossible as it is to restore life when every pulse has ceased to vibrate.’ We are also inclined to hint at the propriety of omitting such anecdotes about harams, stallions, and brood-mares, as occur in vol. I. 309. 311. and II. 457., when he shall at any future period indite letters to his sister. These are points of doctrine not essentially necessary to female education, and may tend to interrupt the slumbers of the young ladies who shall haply follow our prescription, and make use of Mr Hunter’s volumes. For we now think it our duty, notwithstanding the above trifling exceptions, to recommend this work as in every respect the best and safest sedative of the kind which the press hath of late times produced; and the most commodious simple which those persons of quality, country gentlemen, and young officers can take, who have got into the habit of turning over the leaves of books during a certain part of the morning. Its operation is certain; agreeable, and efficacious; and possesses the notable advantage, of not interrupting other pursuits, or confining the patient for any length of time to his room.

ART. XVII. *The Works of Thomas Chatterton; containing his Life, by G. Gregory, D. D. and Miscellaneous Poems.* London. Longman & Rees. 3 vols. 8vo. 1803.

THE works of Chatterton, whose life and death will be the lasting honour and indelible disgrace of the eighteenth century, are at length, after the lapse of more than thirty years, edited in a collected state. We were at some loss to conceive what could have occasioned the long delay of so interesting a publication; and the explanation has proved rather mortifying. *A priori*, such a work seemed particularly calculated to engage the public attention. To the internal merit of the poems, now at length published, is united all the interest excited by the romantic history and lamentable death of the wonderful author, as well as that which arises from the exercise of critical investigation.

vestigation, and the ardour of literary controversy. Nevertheless, the delay may be attended by its own advantages in aiding us to ascertain the real merits of the disputed question. The works of Chatterton, or the poems of Rowley, have survived the controversy which attended their appearance in 1770. Of the assailants and defenders of their originality, many have paid the debt to nature, and others will remember their ardour in the contest as the emotions of an agitating dream. It may therefore be supposed that the public will coolly and impartially determine the controversy (if it yet remains a controversy) upon the solid grounds of evidence; and it might also have been hoped, that circumstances of additional proof, suppressed or misrepresented while the feelings of being duped were yet too acute, might now have been recovered. We will endeavour to shew how far we have been gratified by the present edition, and in what respects it has fallen short of our expectation.

The preface bears the well known and respectable name of Mr Robert Southey; but we are informed that so much of the business has devolved upon Mr Cottle, that it becomes necessary to use the term Editors in the plural. Both poets, and both natives of Bristol, we may suppose that these gentlemen felt a deep and peculiar interest in the task they have undertaken, of rendering a just homage to the genius of their wonderful fellow-citizen, and of contributing to the interest of his surviving relation. The purposes to which the profits of the publication are dedicated, are thus expressed in the preface; and the circumstances, while they do honour to the liberality of the editors and publishers, account for the delay of which we have complained, in a manner deeply disgraceful to the taste and feelings of the public.

In the winter of 1799, a subscription edition of the works of Chatterton was publicly proposed for his sister's benefit. These works had hitherto been published only for the emolument of strangers, who procured them by gift or purchase from the author himself, or pilfered them from his family. From the interest which these circumstances and the whole of Chatterton's history had excited, more success was expected than has been found. At the end of two years, the subscription would not have defrayed the costs of publication.

An arrangement was then made with Messrs Longman & Rees, who have published the work at their own expence, and allowed Mrs Newton a handsome number of copies, with a reversionary interest in any future edition.

The friends and patrons of Chatterton, as well as the former collectors of his poems, have been liberal in their communications to the present editors; and the book accordingly contains many of his productions which have been hitherto inedited. We do not aver that, in general, these additions to his works tend to

augment his fame; on the contrary, as some of them have been written almost during infancy, as others are merely unfinished fragments, and as all seem incorrect and hasty productions, we cannot but consider them as far inferior to the poems ascribed to Rowley, and even to those which Chatterton was himself pleased to own during his life. But, in another point of view, these early and unfinished compositions are very interesting. In Chatterton, above all other poets, we would wish not merely to admire the works upon which he may safely rest his claim to immortal fame, but also to investigate the performances in which his exertions have been less successful; and, by comparing them together, to form, if it be possible, some idea of the strength and weakness of this prodigy of early talent. We therefore approve of publishing such pieces as 'Sly Dick' and 'Apostate Will,' which display the early satirical propensities of young Chatterton; with the elegies, songs, and burlettas, by which he endeavoured rather to supply his necessities, and postpone the dreadful crisis of his fate, than to indulge his genius, or extend his poetical fame. One of his juvenile productions, now published for the first time, is a hymn for Christmas-day, which, if really written about the age of eleven, bears ample testimony to the premature powers of the author. We extract a verse or two, which, when the harmony and ease of expression are contrasted with the author's boyhood, inexperience, and want of instruction, appear almost miraculous.

' Almighty Framer of the skies,
O let our pure devotion rise
Like incense in thy sight!
Wrapt in impenetrable shade,
The texture of our souls were made,
Till thy command gave light.

The Sun of glory gleamed the ray,
Refined the darkness into day,
And bid the vapours fly:
Impelled by his eternal love,
He left his palaces above,
To cheer our gloomy sky.

How shall we celebrate the day
When God appeared in mortal clay,
The mark of worldly scorn,
When the Archangel's heavenly lays
Attempted the Redeemer's praise,
And hailed Salvation's morn?

A humble form the Godhead wore,
The pains of poverty he bore,

To gaudy pomp unknown :
'Tho' in a human walk he trod,
Still was the man Almighty God,
In glory all his own.

Despised, oppressed, the Godhead bears
The torments of this vale of tears,
Nor bid his vengeance rise :
He saw the creatures he had made
Reville his power, his peace invade,
He saw with mercy's eyes.'

Such was the early command of language displayed by a child, who, when a beardless youth, was to gull a whole synod of grizzled deans and antiquaries.

The life of Chatterton, prefixt to these volumes, was written by Dr Gregory of London for the *Biographia Britannica*, and, by his permission, has been reprinted upon this occasion. Although it seems to be compiled with great fidelity, and probably contains all the material facts known upon the subject; we cannot suppress our hearty wish, that either of the present editors had himself undertaken the task of Chatterton's biographer. Many observations must have occurred to them, while preparing these volumes for the press, which have escaped Dr Gregory, written many years ago, and for a more limited purpose. This was the more incumbent upon the editors; because, from persons of poetical taste, so long employed in examining Chatterton's productions, the public must have expected some light upon the Rowleian controversy. Dr Gregory, unwilling, or unable to form a judgment upon this most important point of the life of the youthful poet, has arranged, with great impartiality, the arguments upon both sides, in battle array against each other, leaving his reader to draw such conclusions as his own taste or judgment may enable him to form. Now, this might be very excusable, in the original circumstances in which Dr Gregory's life of Chatterton was published; for the *Biographia Britannica* is not a natural field for literary controversy, though often occupied as such. But in publishing a formal edition of the whole works of Chatterton, in which those articles ascribed to Rowley are included, the public had a right to expect from the editors, their full sentiments upon the point of most essential interest to their author's fame, especially as Mr Cottle, at least, has formed and expressed a decided opinion upon the subject. Besides, without depreciating the labours of Dr Gregory, who has produced a plain and simple account of Chatterton's life, we must express ourselves disappointed, that we have not, from the hand of a poet like Southey, a memorial of his ill-fated brother bard. Few subjects
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of composition, equally affecting or elevating, can ever occur; for when we consider the strange ambiguity of Chatterton's character, his attainments under circumstances incalculably disadvantageous, and his wish to disguise them under the name of another; his high spirit of independence, and the ready versatility with which he stooped to the meanest political or literary drudgery; the amiable and interesting affection which he displays towards his family, with a certain looseness of morality which approaches to profligacy,—we cannot but regret that a subject, uniting so strong an alternation of light and shade, had not been sketched by the hand of a master. We will not suppose that Mr Southey, or his brother editor, retreated from the task of becoming Chatterton's biographer through mere indolence; for, the liberality of their purpose towards his sister, is a pledge to us, that they would not readily 'wax weary in well-doing.' We content ourselves with lamenting that any reason should have occurred to deprive us of the satisfaction which we would have reaped in seeing a new life of Chatterton, with a full view of the Rowley controversy, upon which, in many particulars, the book before us, and the detached notes of the editors, throw so much light. One general remark we cannot help deducing from the melancholy picture of the life before us. The inconsistencies of Chatterton's conduct and character may be, in some measure, ascribed to his situation and extreme youth; yet we fear their original source was in that inequality of spirits with which Providence, as in mockery of the most splendid gifts of genius and fancy, has often conjoined them. This strange disorder of the mind, often confounded by the vulgar with actual insanity, of which perhaps it is a remote shade, is fostered by the workings of an ardent imagination as it is checked and subdued by mathematical or philosophical research. It is reconcileable (as is actual insanity) with the exertion of the greatest address in gaining a particular point, or in imposing upon the rest of mankind. In both cases, the object to be attained, is usually, in the eyes of the world, either altogether undesirable, or totally inadequate to the trouble and address expended in attaining it.

This disease (for such it is, and of a dreadful complexion) may also, like the extremity of mental derangement, be admitted to palliate the deviations from truth and moral rectitude, which it is peculiarly apt to occasion. Without considering the forgery of Rowley's poems in so heinous a light as if they had been a bill or bond, and pecuniary advantage the object of the fraud, we cannot regard the imposture as of an indifferent or harmless nature. Neither was the end proposed, being apparently the mere internal satisfaction of imposing upon the world, or, at best, the sullen obstinacy of maintaining an assertion which had been hastily made,

made, apparently adequate to the immense labour necessary to sustain the credit of Rowley. But the ardent mind of Chatterton, who had pitched the standard of his honour on this particular ground, urged him to maintain it at the sacrifice of the poetical reputation he might have acquired by renouncing a phantom of his imagination, and at the yet more important dereliction of personal truth and moral rectitude.

The alternate fits of melancholy and bursts of high spirits which Chatterton manifested; the strange paper entitled his *will*, in which, with a mixture of levity, of bitter satire, and actual despair, he announces a purpose of self-destruction; above all, the extravagant hopes which marked his arrival in London, and the suicide which finally closed his short and eventful career,—all announce to us that irregular ambition, and impatience of the natural progress of society, which indicate an inflamed imagination and a precarious judgment.

Before leaving the life of Chatterton, we must intimate, that we are somewhat displeased with the commendatory and laudatory scraps of verse and prose which, in revival of a good old custom, are tacked to the works of the author. Dr Vicesimus Knox leads the van with a heavy and dolorous imitation of Sterne (which lumbers along like Mr Shandy's chaise when it was dragged into Lyons without the wheels), followed in sorrowful procession by the Laureate, by Mrs Cowley, Mrs Robinson, Miss Helen Maria Williams, Mr Herbert Croft, and other persons (as the newspapers have it) of talents and distinction. We confess that we think Chatterton little honoured by their tribute of mawkish and affected sympathy. It is disgusting to hear blue-stocking ladies jingle their rhymes, and pedantic schoolmasters pipe upon their sentimental whistles a dirge over the grave of departed genius. We except from this censure a monody of Mr Coleridge, which, though very unequal, and carelessly executed, exhibits in many passages the feeling and poetical talent which that gentleman always possesses, and sometimes chuses to display. We also except some verses by Mr Hayley, the subject having raised him, on this occasion considerably above the cold, correct mediocrity of his usual tone of poetry.

The poems of Chatterton may be divided into two grand classes—those ascribed to Rowley; for surely, to use Mr Cottle's expression, it is time to pluck the borrowed plumes from the fictitious monk, and to place them on the brow of the real poet;—and those which the bard of Bristol avowed to be his own composition. Of these classes the former is incalculably superior to the latter in poetical powers and diction. This is a remarkable circumstance, and forms, we think, the only forcible argument

in support of the existence and claims of Rowley. But there is a satisfactory answer, founded upon more than one reason, for the inferiority betwixt the avowed and concealed productions of Chatterton. He produced those antiquated poems which he ascribed to Rowley when a youth of sixteen; and his education had been so limited, that his general acquirements were beneath those of boys of the same age, since he was neither acquainted with French nor Latin. If, therefore, there is other evidence to prove that the poems of Rowley were his own composition, it follows, that the whole powers and energies of his extraordinary talents must have been converted to the acquisition of the obsolete language and peculiar style necessary to support this deep-laid deception. He could have no time for the study of our modern poets, their rules of verse, or modes of expression, while his whole faculties were intensely employed in the herculean task of creating the person, history, and language of an ancient poet, which, vast as these faculties were, was surely sufficient wholly to engross, though not to overburden them. When, therefore, due time is allowed for a boy of sixteen to have acquired the astonishing skill 'in antique lore' necessary to the execution of this great project, it will readily be allowed that he must have come to the composition of modern poetry a mere novice, destitute of all adventitious support, and relying only on the strength of his own genius, which, powerful as it was, had hitherto been used in a different and somewhat inconsistent direction. In the poems of Rowley therefore, we read the exertions of Chatterton in the line of his own choice, aided by all the information which his researches had enabled him to procure, and stimulated by his favourite ambition of imposing upon the literary world; but, in his modern poems, he is engaged in a style of composition to which he was comparatively a stranger, and to which the bent of his mind and turn of his studies had not naturally inclined him. Although this argument seems to account, in a manner sufficiently satisfactory, for the inequality of those productions in which Chatterton has thrown aside the mask of Rowley, it is not the only one which can be offered. Let it be remembered, that admitting Chatterton to be engaged in a deception, he had pledged himself to maintain it; he was therefore carefully to avoid whatever might tend to remove the veil which he had spread over it; and such was his firmness of perseverance, that he seems to attest the originality of Rowley, even in the *will* which he wrote before his projected suicide.* Without therefore supposing that he had *underwrit-*

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* This circumstance is much founded on by the believers. To us it only affords an additional proof of the unconquerable and haughty perseverance

ten his own poems, in order to set off those of Rowley, it is obvious that the former must have been executed under a degree of embarrassment highly unfavourable to poetical composition. As Rowley, Chatterton had put forth his whole strength, and exerted himself to the utmost in describing those scenes of antique splendour which captivated his imagination so strongly. But when he wrote in his own character, he was under the necessity of avoiding every idea, subject, or expression, however favourite, which could tend to identify the style of Chatterton with that of Rowley; and surely it is no more to be expected that, thus cramped and trammelled, he should equal his unrestrained efforts, than that a man should exert the same speed with fetters on his limbs, as if they were at liberty. Let it be further considered, that there exist persons to whom nature has granted the talent of mimicking, not merely the voice and gesture, but the expression; ideas, and manner of thinking of others, and who, speaking in an assumed character, display a fire and genius which evaporates when they resume their own. In like manner, Chatterton, with all his wonderful powers, appears, from the habit of writing as a fictitious personage, and in a strangely antiquated dialect, to have in some degree formed a character to his supposed Rowley, superior to what he was able to maintain in his own person, when his disguise was laid aside. The veil of antiquity also, the hard, and often inexplicable phrases, which he felt himself at liberty to use under his assumed character of a poet of the fifteenth century, serve, in a considerable degree, to blind and impose upon the reader, who does not find himself entitled to condemn what he does not understand, and who is inclined, from the eminent beauty of many passages, to extend his gratuitous admiration to those which are less intelligible. But, when writing in modern English,

perseverance of Chatterton's character. We attach no implicit faith to dying declarations; for, upon points in which fame is implicated, the voice of the passions is heard even in the hour of death. We disclaim every application of the illustration which can be disrespectful to the memory of Chatterton; but it is well known, that criminals, whose crimes are not of a nature to meet public sympathy, often at their death endeavour, by a denial of guilt most satisfactorily proved, to avert the odium attached to their persons and memory. It may be thought that Chatterton would have better consulted his own fame, by avowing these beautiful poems; but the pride of every one is not sustained by the same nutriment. He probably deprecated the doubtful fame of an ingenious but detected impostor, and preferred the internal consciousness, that, by persisting in the deception he had commenced, future ages might venerate the poems of Chatterton, under patronage of the fictitious Rowley.

English, this advantage is lost, and we are often shocked with a bald and prosaic tautology, with bombast, and with coarseness of expression, all the defects, not of Chatterton's natural genius, but of his extreme youth and deficient education, and many instances of which will be found to exist by curious inquirers, even under the seemly and antique *Alban* of the *Deigne Thomas Rowleic, Preiste of St Johans, Bristowe*.

When the believers in Rowley are driven from this strong ward, we apprehend they can hardly make good their footing in any other. Two or three gentlemen, companions of Chatterton while at school, have ventured to give it as their decided opinion, that, according to their estimation of his talents, he was unable to compose the poems of Rowley. Mr Cottle treats with well-merited contempt the evidence of these persons, who, from recollection of an opinion formed while school-boys, conceive the plummet of their understanding adequate to fathom the depth of Chatterton's genius. A list is given of the parchments which have been produced as remnants of Rowley's MSS.; all of which, from the shape and texture, as well as from the handwriting, are very evidently forgeries by the unfortunate young man from whom they were recovered.

Above all, the internal evidence arising from the poems themselves, has always appeared to us to convey decisive marks of modern origin. The smoothness of the verse, which, in most cases, resembles the most correct modern poetry, as well as the complicated nature of the stanza, are highly suspicious. It is no doubt true, that, in some compositions of a lyrical nature, the old English poets attained a considerable degree of ease and fluency, chiefly such as were adapted to the music of the minstrels, when the necessity of following the tune, compelled the poet to observe a regularity of rythm. Such, for example, are the poems of Lawrence Minot. But these poems are flimsy songs, in which the same idea, and often the same words, are repeated and chimed upon, in order to attain the necessary smoothness. Take, for example, a verse of Minot, which, for the sake of the uninitiated, we have stripped of the antique spelling,

‘ Sir David the Bruce
 Was at distance,
 When Edward the Baliolfe
 Rode with his lance :
 The north end of England
 Taeched him to dance.
 When he was met on the moor
 With mikell mischaunce,
 Sir Philip the valayse
 Might not him advance ;

The

The flowers that fair were
 Ar fallen in France :
 The flowers are now fallen,
 That fair were and fell :
 A boar with his bataille
 Has don them to dwell.'

The case of these lines is the smoothness of mere ballad, attained by the tenuity of idea, and the tautology of expression. But the smoothness of Rowley is combined with all the graces and refinement of modern poetry. Take two stanzas at hazard, divested of the artificial *patina*, or rust of antique orthography—

'The sun was gleaming in the midst of day,
 Dead-still the air, and eke the welkin blue,
 When from the sea arose in drear array,
 A heap of clouds, of sable, sullen hue,
 The which full fast into the woodwind drew,
 Hiding at once the sunnes festive face ;
 And the black tempest swell'd, and gather'd up apace.

The gathered storm is ripe ; the big drops fall ;
 The sun burnt meadows smoke, and drink the rain ;
 The coming *gustness* doth the cattle 'pal ;
 And the full flocks are driving o'er the plain,
 Dash'd from the clouds the waters fly again,
 The welkin opes, the yellow levin flies,
 And the hot fiery steam in the wide flashing dies.'

Can any one read this beautiful description of a landscape overshadowed by a thunder storm, and doubt for a moment that it is by a modern hand?—yet we have only discarded *hiltring*, *setye*, *forswat*, and *smothe*, all other differences betwixt our copy and the text being merely in spelling. Chatterton's answer to the strong objection arising from the smoothness of Rowley's poetry, when stated to him by Horace Walpole, is very remarkable—'The harmony is not so extraordinary, as Joseph Iscarn is altogether as harmonious.' Now, as Joseph Iscarn is equally a person of dubious existence, this is a curious instance of *placing the elephant upon the tortoise*. It is not our wish to engage farther in the controversy. If any one resists the internal evidence of the style of Rowley's poems, we make him welcome to the rest of the argument ; to his belief that the Saxons imported heraldry, and gave armorial bearings (which were not known till the time of the Crusades) ; that Mr Robert Canning, in the reign of Edward IV. encouraged drawing, and had private theatricals ; that Mr Burgum, the pewterer of Bristol, derived his descent from Simon de Leynete Lyze, *alias* Senlez, who married Matilda, daughter

daughter of Waltheof, Earl of Northumberland, Northampton and Huntingdon; that Mr Stephens of Salisbury drew his ancestry from Od, Earl of Blois and Holderness, who flourished about 1095; and that Chatterton himself represented the Sieur de Chasteautonne, of the house of Rollo, the first Duke of Normandy.

Quibus si credideris,

Expectare poteris

Arthurum cum Britonibus.

Nothing can be more extraordinary than the delight which Chatterton appears to have felt in executing these numberless and multifarious impositions. His ruling passion was not the vanity of a poet who depends upon the opinion of others for its gratification, but the stoical pride of talent, which felt nourishment in the solitary contemplation of superiority over the dupes who fell into his toils. He has himself described this leading feature of his character in a letter to Mr Barret.

'It is my pride, my damned, native, unconquerable pride, that plunges me into distraction. You must know that 19-20th of my composition is pride. I must either live a slave—a servant—have no will of my own which I may fairly declare as such, or DIE.' Vol. III. p. 419.

The art and avidity with which the youthful poet seized every opportunity, 'through an excess of ingenuity in a literary sense, to impose on the credulity of others,' is justly remarked by Mr Cottle to be 'the predominant quality which elucidates his character, and is deserving of minute regard by all who attempt to decide on the Rowleian controversy.' We shall extract the instances which the editor has brought together, forming a curious picture of a most active and powerful mind, imbued with a strange rage for the practice of literary imposture; omitting, however, the notes, that we may not exceed our bounds.

'I. A new bridge is just completed over the Avon at Bristol.—Chatterton sends to the printer a description of the passing over the old bridge, for the first time, in the thirteenth century; on which occasion two songs are sung by two saints, of whom nobody ever heard, and in language precisely the same as Rowley's, although he lived two hundred years after the event was said to have taken place.

'II. Mr Burgum is a man attached to heraldic honours—Chatterton gives him his pedigree from the time of William the Conqueror, and allies him to some of the most ancient families in the kingdom!

'III. Mr Burgum is one of the first persons who expresses an opinion of the authenticity and excellence of Rowley's poems. Chatterton, pleased with this first blossom of credulity, and from which he presaged an abundant harvest, with an elated and grateful heart, presents him with the 'Romaunt of the Cnyghte,' a poem, written by JOHN DE BERGHAM, one of his own ancestors, about four hundred
and

and fifty years before; and the more effectually to exclude suspicion, he accompanies it with the same poem, modernized by himself?

‘IV. Chatterton wishes to obtain the good opinion of his relation, Mr Stephens of Salisbury, and, from something which it is possible his keen observation had remarked in Mr Stephens, he deems it the most effectual way, by informing him that he is descended from Fitz-Stephen, grandson of the venerable Od, Earl of Blois, and Lord of Holderness, who flourished about the year 1095!

‘V. Mr Catcott is a worthy and religious man; and who, from never intending to deceive, suspects no deception in others.—Chatterton, who is a skilful engineer, adapts the nature of his attack to the strength of the fortress, and gives him an ancient fragment of a sermon on the Divinity of the Holy Spirit, as *written* by THOMAS ROWLEY!

‘VI. Mr Barrett is zealous to prove the antiquity of Bristol.—As a demonstrable evidence, Chatterton sends him an escutcheon (on the authority of the same Thomas Rowley) borne by a Saxon, of the name of Ailward, who resided in *Bristow* in the year 718!

‘VII. Mr Barrett is also writing a comprehensive history of Bristol, and is solicitous to obtain all possible information concerning it.—Chatterton seizes the opportunity, and presents him, at *different times*, with an account of all the churches and chapels of Bristol, as they appeared three hundred years before, and accompanies it with drawings and descriptions of the castle; the whole of this information being unsupported by either document or tradition, and resting alone on the evidence of ‘the gode prieste *Thomas Rowley*,’ between whom and *Thomas Chatterton*, prejudice itself must allow, there was a great equality of talent, as well as a great similitude of pursuits. They were both poets, both antiquarians, and both perpetually adverting to heraldry.

‘VIII. Public curiosity and general admiration are excited by translations from the Erse of Ossian.—Chatterton, who gave precedence to none in ‘catching the manners living as they rise,’ publishes a succession of poems from the *Saxon* and *Welsh*, indifferent to the inconsistency, or otherwise not aware, that he had professedly translated works in the *same* style and with the *same* imagery, from the TEUTONIC and CELTIC, two languages of different origin and genius, and whose poetry, of all their writings, has ever been considered as the most dissimilar.

‘IX. Mr Walpole is writing the history of British painters.—Chatterton, (who, to a confidential friend, had before expressed an opinion that it was *possible*, by judicious management, to deceive even this master in antiquities), with full confidence sends him an account of eminent ‘Carvellers’ and ‘Peyncters,’ and informs him of others who once flourished in BRISTOL! but of whom the present inhabitants of Bristol never heard, and who are mortified at having no other evidence of the distinguished honour ascribed to them, than the solemn asseveration of that ‘something, nothing, not to be defined,’ Thomas Rowley!

'But these are all subordinate deceptions. Chatterton's ambition embraced a larger range, and was circumscribed by no other limit than, in the person of Rowley, of deceiving the whole world. And, that he succeeded in a great and unaccountable degree, is attested by the voluminous controversies of antiquarians, historians, and poets. The object bespoke the comprehension of his mind, and its partial success as a lasting monument of what perseverance may effect when supported by genius.' p.—509—514.

This curious detail of repeated imposture, regularly executed at the time when circumstances appeared to give an opening for them, may surely suffice to excite the suspicion of the most credulous believer in Rowley. Alike a forger of style, of MSS., and of drawings, nothing escaped the imitation of a youth, born as it were with the rare talents of executing such multiplied deceptions, and with a temper framed to delight in his success, which it may be hoped is still rarer. Of the merit of the Rowley Poems, in a critical point of view, it is not here the place, or now the time to speak. They have been long subjected to the public; and in spite of their being written in a dialect which resembles the ancient or modern language of England, hardly more nearly than the vocabulary of George Psalmanazar did that of Formosa, they have been ever esteemed compositions of the highest merit. The drama called *Ella*, many parts of the *Battle of Hastings*, the *Ballad of Charity*, that of *Sir Charles Bawdin* (which somewhat resembles the antique style of minstrel poetry) the *Dirge*, and several of the *Eclogues*, may rank with the labours of our most distinguished poets. Pity it is, that the circumstances and temper of the author combined to shorten a life distinguished by such works of excellence during its limited career.

The poems avowed by Chatterton were, with a few exceptions, satirical or amatory. In the former line, his inclination for severity is more remarkable than his success. Perhaps he adopted this style of composition, not only in compliance with a natural acerbity of temper aggravated by his dependant situation, but also as most remote from the walk of the moral and heroic Rowley. Satire, however, in a polished age, requires more than mere genius and the force of numbers. General invective, however coarse and vehement, falls heavily to the ground unless sharpened and guided by that accurate and discriminating knowledge of men and manners which is not often acquired in early youth, or easily attained in obscure circumstances. The personal reflections which his satires level against those persons in *Bristol* to whom Chatterton is admitted to have owed the deepest obligations, do little honour to their author. We hardly know whether to laugh or grieve, when he reproaches Catcott,
down

down whose throat he had crammed the improbable tale of Rowley, with gross *credulity*, because he was a believer in revelation! The amatory poems are pretty much what might have been expected from his declared intention 'of making acquaintance with a girl in the neighbourhood, supposing it might soften the austerity of temper study had occasioned.' Accordingly, 'he wrote a poem to her, and they commenced corresponding acquaintance.' Little was to be expected from verses written by a lover who had adopted his sentiments of preference *pour se desennuyer*. In some of his other poems, particularly the elegy upon Mr Fairford, traces are remarked by Dr Gregory, of the descriptive and personifying powers exerted in the poems of Rowley.

Of Chatterton's prose pieces, the less that is said, the kinder we shall be to his reputation. In the essays which he wrote for periodical publications, as, 'the Hunter of Oddities,' 'Adventures of a Slave,' and the like, he displays little humour, and great inclination to substitute in its place personal abuse and private slander. The imitations of Ossian, published as translations from the Saxon, are not only utterly incongruous with the style of the language from which he pretended to have rendered them, but are incalculably inferior to the sophisticated productions of Macpherson. This is not to be wondered at. Macpherson, with powers infinitely inferior to those of Chatterton, had the advantage of an intimate acquaintance with the Celtic poetry, much of which he probably interweaved with his own imitations: The bard of Bristol had only Macpherson to study; and, at an age when bombast is seldom distinguished from sublime, he caricatured, in his Saxon poems, the worst passages of the Pseudo-Ossian.

The present edition contains many prose imitations of the antique, published from Chatterton's MSS. in the British Museum. These are very important, as throwing light upon the Rowleian poems. Some curious passages occur in these documents. While Chatterton wrote plain narrative, he imitated, with considerable success, the dry, concise style of an antique annalist; but when any thing required a more dignified or sentimental style, he mounted the fatal and easily recognized car of the son of Fingal. Thus, in an account of St Marie Magdalene's chapelle, after informing us it 'was ybuilden bië Elle, warden of the castle near Ellegate, Sythina clessen, New-gate—yn this chapelle was ysworne a treatye betweene Godwynne Erle or Abthane of Kent, Harold eftsoons Kyng of England,' &c. &c.; he of a sudden thus changes his tone in commemorating his favourite Elle—'Elle, descended from the kyngelie bloude of Mercyans,' raged in the
P 2 fyghte

fyghte like a wilde boare in the woode; drearie as a blacke cloude yn ungente wedder he sweep whole rankes to helle. Lyke to the castle of Bryghstowe was his mind gentle and meeke,' &c. &c. Again, in a very sober narrative of the 'Ryse of Peyncleyne in Englande,' written by Rowley for his friend Cannynge, after a sort of matter of fact account of various artists, we come to one called *Aslem*, a notable performer of the counynge myserie of *stein-eynge glasse*. This person was taken by the Danes, and ordered to be slain. The Dane to whom the execution was entrusted, discovered Aslem to be his brother. At this crisis, Rowley tucks up his monkish frock, and mounts the Celtic Pegasus. 'Affrighte chaynede uppe hys soule; ghastrnesse dwelled yn his breaste. Oscarre (a name of some import, as proving the existing idea in the mind of the author)—Oscarre, the greate Dane, gave histe he should be forslagen; no teares colde availe; the morning, cladde in robes of ghastrnesse, was come,' &c. &c. An instance of a curious mistake committed by Chatterton, occurs in these excerpts from the Pseudo-Rowley prose writings. In a MS. in Chatterton's handwriting, in the Museum, there occur several excerpts from Chaucer, apparently culled to bolster out some intended imitations. Among others we find the two lines respecting the mormal on the leg of the pilgrim's cook.

' But great harm was yt, as it thought me,
That on his skinne a mormal had he.'

Skinne is here mis-copied for *shin*. This mistake, and another more whimsical, we can trace into the 'Rolle of Seyncte Bartholæmeweis Priorie,' printed in Barret's history of Bristol, to whom it was communicated by Chatterton. Among a list of medical books, said to be preserved in the Infirmary, or *Ache-chamber* of the Priorie, we find, 'Gylbertines rolle of Ypocrates: the same fryarres booke of brenninge *Johan Stowe of the cure of mormalles and the waterie leprosie: the rolle of the blacke mainer*.' In a note on these two last articles, we are told, 'Chaucer says, on his skin a mormalle had he and a blacke manger.' Now, in the first place, Chatterton adhering to his erroneous transcript from Chaucer, of *skinne* for *shinne*, has made Johan Stowe lecture on the cure of mormalles, as if they were, like the leprosy, a cutaneous distemper, and not a cancer upon the bone. But, besides, he has so far mistaken his author, as to take *blanc-manger*, a dish of exquisite cookery, which is pronounced by Chaucer to be the cook's master-piece of skill, for *blacke manger*, some strange and non-descript disease, under which he laboured, in addition to his *mormal*; and upon which there was a roll or essay in the *Ache-chamber* of St Bartholomew's priory. Chaucer's words are,

' But

‘ But gret harm was it, as it thoughte me,
That on his *shinne* a mormal hadde he,
For *blanc-manger* that made he with the best.’

The principal ingredient of *blanc-manger* (if we recollect) was a cock brayed in a mortar. The resemblance of the letters *n* and *u* in the black letter, probably led Chatterton to read *blauc* for *blanc*; and as he understood no French, his judgment could not correct his eye. We are thus able decidedly to trace the taste and the errors of Chatterton into the productions of Rowley. We do not, however, suppose that all the information contained in the works of Rowley was actually the invention of Chatterton. The keen eye and ardent research of the young poet, probably traced and interweaved with his narrative traditional anecdotes preserved in his native city. Nothing that had an antique or uncouth appearance seems to have escaped his notice. Mr Tyrwhitt detected a curious instance of his minuteness of remark. In the Ballad of Charité, mention is made of a *horse-millanere*, a phrase at which the reader has usually paused with surprise. In the town of Bristol, and precisely in the street through which Chatterton passed to school, is hung forth a wooden horse decorated with ribbons, purporting to be the sign of a *horse-millanere*.

Nothing can afford a stronger picture of the force and weakness of the human mind, than the readiness with which Chatterton supplied himself and his particular friends with flourishing trees of genealogy, in which the sextons and pewterers of Bristol are deduced from a line of ancestry, which Howards and Hastings might envy, and decorated with all the splendid emblazonment of heraldry. We are mute with astonishment at the grave and sober advice of the sexton's son of Radcliffe to his relation Mr Stevens of Salisbury: ‘ When you quarter your arms, in the mullet, say Or, a fess, vert, by the name of Chatterton. I trace your family from Fitz-Stephen, son of Stephen Earl of Aumerle, in 1095, son of Od, Earl of Bloys, and Lord of Holdernesse.’ If the imagination of Chatterton was not actually so far vitiated, as in some degree to believe the reveries which he imposed upon others, we cannot help thinking that, as Johnson says of Milton, his impudence must have been at least equal to his stupendous abilities. We were also diverted with the conclusion of the pedigree made out for Mr Burgum of Bristol, which begins with the Conqueror, and very prudently concludes about the reign of Charles II. when Mr Burgum might perhaps know something of his ancestors. Chatterton linked and gilded this splendid chain of ancestry through all the ages remote enough to leave unbounded scope for fiction: when he approached the regions of probability, he let the end loose, that his friend might attach himself to it the

best way he could. There is in Cumberland an ancient family, who have long possessed and taken their name from the manor of Brougham, to which Chatterton seems to allude, when he mentions the Castle of Bourgham in Northumberland. But the castle was, we believe, an appanage, not of the De Bourghams, lords of the manor, but of the Veteriponts and Cliffords.

We now dismiss the works of the unfortunate Chatterton, heartily wishing they may experience from the public kinder treatment than their unfortunate and proud-spirited author. To the admirers of poetry they will ever be acceptable; nor can their history be heedfully perused, without imparting an awful lesson; for the fame of Chatterton is not merely a light to be wondered at—it shines as a beacon to point out the shoals upon which he was wrecked. The youthful reader, if conscious of powers which elevate him above his situation in life, may learn to avoid an over-weening reliance upon his abilities, or an injudicious and unfair exertion of them. He may learn, that if neglect or contempt obstruct him in the fair pursuit of fame, it is better to prefer obscurity, than to attain, by the crooked path of literary forgery, the ambiguous reputation of an ingenious impostor. Above all, he may learn to guard against those sallies of an ill-regulated imagination, which buoyed up Chatterton with the most unreasonable expectations, only to plunge him into despair and suicide. And if there be one who, conscious of inferior mental powers, murmurs at being allotted but 'the single talent,' and looks with envy on the flights of superior genius, let him read the life of Chatterton, and remember that of him it may be truly said,—

Largus et exundans letbo dedit ingenii fons.

ART. XVIII. *Memoirs of the Life of Dr Darwin, chiefly during his residence at Lichfield; with Anecdotes of his Friends, and Criticisms on his Writings.* By Anna Seward. London. 1804. 8vo. pp. 420.

IT has been long held, on high critical authority, that history must always please, independently of the particular mode, and even in spite of the defects, of its execution; and unquestionably even that moderate portion of fact which may be reasonably expected in the life of every eminent individual, can scarcely be presented under any disguise so perversely absurd, as entirely to divest it of interest. Under the influence of stubborn curiosity, we have been accordingly carried through a faithful perusal of these memoirs of the celebrated author of the 'Botanic Garden;' and although we are bound to admit that our labour has not been entirely unrewarded,

rewarded, yet Miss Seward must forgive us, if we add, that the most striking lesson we have derived from her volume, has been the truly wonderful extent of that tolerant maxim to which we have alluded. The share which she appears to have long enjoyed of the intimate society of Dr Darwin, and her opportunities of accurate information relative at least to a considerable portion of his life, had given to Miss Seward some peculiar advantages in becoming, as she terms it, 'the recorder of vanished genius.' It is therefore the more to be regretted that she should not have been restrained, by some visitations of a better taste, from clothing her narrative in a garb so injudicious and fantastic. But it would appear that Miss Anna Seward has been too long accustomed to soar into the high and giddy regions of verse, to be able to tread with sober step and becoming gravity of air in the humbler path-way of prose.

Of the matter and arrangement of these Memoirs, the Preface gives us the following notice :

'My work consists of the following particulars :—the person, the mind, the temper of Dr Darwin ; his powers as a Physician, Philosopher, and Poet, the peculiar traits of his manners ; his excellences and faults ; the Petrarchan attachment of his middle life, more happy in its result than was that of the Bard of Vacluse ; the beautiful poetic testimonies of its fervour, while yet it remained hopeless ; an investigation of the constituent excellences and defects of his magnificent poem, the Botanic Garden ; remarks upon his philosophic prose writings ; the characters and talents of those who formed the circle of his friends while he resided in Lichfield ; and the very singular and interesting history of one of them, well known in the lettered world, [Mr Thomas Day] whose domestic history, remarkable as it is, has been unaccountably omitted by the gentleman who wrote his life.' P. ef. p. v, vi.

After perusing this table of contents, the reader will have himself alone to blame if he expect in this volume any exact or orderly deduction of the facts of Dr Darwin's life. Miss Seward apparently spurns the fetters of vulgar, chronological narration ; and has chosen rather to expatiate, free and at large, under the impulse of her own spontaneous feelings, or accidental associations. After having followed her with patience, through her eccentric and capricious evolutions, we are unable to say that our progress has been rendered more pleasing by this irregular variety, or that it has afforded us any tolerable compensation for the want of a distinct and intelligible narrative. An analysis of the first chapter of the work may serve sufficiently to justify these remarks, and may furnish a sufficient specimen of its plan and execution.

On the birth, parentage, and education of her hero, Miss Seward has not deigned to bestow a single line. We are abruptly

introduced to him at the age of twenty-four, when he first came to practise physic at Lichfield in the autumn of the year 1756; and even then, instead of proceeding directly in her narrative, she stops on the threshold to give us a 'sketch of his character and manners,' such as they had appeared to her in the subsequent course of Dr Darwin's life. This inversion of the usual arrangement in biographical writing may be perfectly consonant to the desultory plan of these memoirs; but, in itself, it is so palpably injudicious, that there is very little hazard of its adoption as a model. Within these few years, a similar innovation was attempted by a Scottish historian, who, at the commencement of every reign, introduced that general delineation of the character of the sovereign, which has usually found a place at the close: but, if we may judge from our own feelings, the example of Mr Pinkerton will not probably prove more seducing than that of Miss Seward.

Of this 'sketch of the character and manners of Dr Darwin,' we can only say, that it leaves no very distinct impression on the mind; and *that* impression, such as it is, has not, in our own case at least, been extremely favourable. But Miss Seward does not stand forth as the indiscriminating panegyrist of her deceased friend; nor does she appear to have been withheld, by any violent or undue partiality; from discharging those 'sacred duties of biography,'—'beneath the ever present consciousness' of which she would be understood to have proceeded. Of the justice of her claims to the praise of rigid impartiality, those only can be competent judges, to whom Dr Darwin was personally known; but it is perhaps less difficult to discover that Miss Seward was not altogether equal to the task of delineating with truth the various parts of his character, or of appreciating the qualities of which it was composed. In this preliminary sketch, and in other parts of her work, we are, indeed, presented with a number of striking traits of temper and of manners, such as must have been obvious to common observation; but in her attempts to mark the extent, the limitations, and the peculiar character and complexion of those higher powers of mind, by which alone the possessor becomes an object of serious interest—her description becomes feeble and indistinct, and she takes refuge in vague, general, or exaggerated statement. Thus, we are informed, that 'beauty and symmetry had not been propitious to his exterior;' that 'he stammered extremely;' that he was 'sore upon opposition,' and overbearing and sarcastic in conversation; but whether from the '*consciousness of great native elevation above the general standard of intellect*,' we may be permitted to doubt. Moreover, we are told, that 'extreme was his scepticism to human truth;'—that
habits

habits of distrust tinctured his conversation with an apparent want of confidence in mankind;—and that, ‘perhaps this proneness to suspicion mingled too much of art in his wisdom.’ Farther, we are told that he abstained from ‘vinous fluid;’ that he had ‘an absolute horror of spirits of all sorts;’ that his only tolerance was in favour of home-made wines; that ‘acid fruits, with sugar, and all sorts of creams and butter, were his luxuries;’ but that ‘he always ate plentifully of animal food.’ Of his virtues and talents, we learn that ‘professional generosity distinguished Dr Darwin’s medical practice;’ that ‘his was the cheerful board of open-housed hospitality;’ and that ‘generosity, wit and science were his household gods;’ that nature had bestowed on him ‘the seducing and often dangerous gift of a highly poetic imagination;’ but that ‘through the first twenty-three years of his practice as a physician, Dr Darwin, with the wisdom of Ulysses, bound himself to the medical mast, that he might not follow those delusive syrens, the muses, or be considered as their avowed votary;’ nor was it till then, that ‘the impregnable rock on which his medicinal and philosophical reputation were placed, induced him to contend for that species of fame which should entwine the Parnassian laurel with the balm of Pharmacy.’

Such, we can assure our readers, is the amount of the information respecting the character and manners of Dr Darwin, for which we are here indebted to his biographer. It may perhaps serve to moderate the expectations of those who may have unwarily looked only to the enviable opportunities of observation which she appears to have enjoyed.

On ‘returning to the dawn of Dr Darwin’s professional establishment,’ we are informed by Miss Seward of the sudden fame he acquired by his success in a desperate case of fever, and of the imputations of rashness which were ignorantly attached to his practice. Mrs Darwin is then introduced on the scene; and from the account given by Miss Seward, she appears to have been an interesting and accomplished woman: but we must be forgiven if we are not greatly charmed with the felicity of a long oration which is put into her mouth while on her deathbed.

Soon after this lady’s death, Dr Darwin purchased an old house in the city of Lichfield, on the lilliputian improvements of which Miss Seward has lavished all her powers of picturesque description.

‘To this *rus in urbe*, of Darwinian creation, resorted, from its early rising, a knot of philosophic friends in frequent visitation. The Rev. Mr Michell, many years deceased. He was skilled in astronomic science, modest and wise. The ingenious Mr Kier of West Bromich, then Captain Kier. Mr Boulton, known and respected wherever mechanic philosophy is understood. Mr Watt, the celebrated improver of the steam

engine. And, above all others in Dr Darwin's personal regard, the accomplished Dr Small of Birmingham, who bore the blushing honours of his talents and virtues to an untimely grave.'

Tired already of her proper subject, Miss Seward again digresses into the private history of those who moved in 'the Darwinian sphere';—of Mr Edgeworth and his wives; of Dr Small, and the elegies and epitaphs written by his friends; and particularly of Mr Thomas Day, the author of the popular little volumes of *Sandford and Merton*. Of the last of these gentlemen, a very full and disproportioned account is given, and a great many anecdotes are told, which we shall not attempt to retail, but which, in their proper place, might serve to illustrate the singularly romantic and hair-brained character of this modern philosopher. With the history of Dr Darwin's life they have no intimate connexion: and so ends the first chapter.

On 'resuming the recollected circumstances of Dr Darwin's life,' Miss Seward is unable for a moment to withstand her wayward propensity to digression; and our attention is instantly drawn aside to the contemplation of new groupes of visitors and friends who made their appearance at Lichfield 'after Dr Small and Mr Michell had vanished from the earth, and Mr Day and Mr Edgeworth, in the year 1772, had left the Darwinian sphere.' But it would be vain to follow this lady in her meandering course; and by attempting it, we should equally fatigue our readers and ourselves. Throughout the whole of that portion of the work which bears the semblance of narrative, it is only for a moment that we catch a glimpse of the principal figure; and even then, our gratification is too often dashed by the frivolity of the information which is conveyed. The reader may look in vain for any thing which merits the name of just biographical narrative. Even when Dr Darwin is the subject, little else is to be found than an inflated translation of the tea-table talk of Lichfield; nor will all the good things which have been uttered on sundry occasions by the choice spirits of the place, be felt as any adequate compensation for this radical defect.

'In the year 1768,' we are told, 'Dr Darwin met with an accident of irretrievable injury in the human frame: he was thrown from a whimsical carriage of his own invention, and broke the patella of his right knee. For the edification of the curious reader, we extract a philosophical observation suggested to Miss Seward by this occurrence.

'It is remarkable, that this uncommon accident happened to three of the inhabitants of Lichfield in the course of one year; first, to the author of these memoirs in the prime of her youth; next, to Dr Darwin; and, lastly, to the late Mr Levett, a gentleman of wealth and consequence

consequence in the town. No such misfortune was previously remembered in that city, nor has it once recurred through all the years which have since elapsed.' p. 62.

While Dr Darwin resided at Lichfield, Dr Johnson was repeatedly there on his visitations to Miss Lucy Porter. Miss Seward informs us, that 'they had one or two interviews, but never afterwards sought each other. Mutual and strong dislike subsisted between them.' Miss Seward goes on to remark as curious, that, in Johnson's correspondence, 'the name of Darwin should not be found, nor indeed that of any of the ingenious and *lettered* people who lived there; while of its more common-life characters there is frequent mention, with many hints of Lichfield's intellectual barrenness, while it could boast a Darwin and other men of classical learning, poetic talents, and liberal information.' Of these ingenious and lettered persons, Miss Seward here gives the reader a farther enumeration, accompanied with specimens of their poetic and colloquial talents, which we shall not presume to injure by a mutilated extract. That Dr Johnson's colloquial despotism should have alarmed the self-importance of a man like Darwin, who was ambitious of being himself a despot in his own 'sphere,' and who is described as 'sore upon opposition, whether in argument or conduct,' can hardly be matter of much surprise. The colloquial intrepidity of Johnson was unquestionably too firm to have suffered him to shrink from the society of any man; but if he was avoided by Darwin and the Lichfield coterie, as Miss Seward seems to admit, his silence cannot well be accused of injustice to their talents and accomplishments.

'About the year 1771 commenced that great work, the *Zoonomia*, first published in 1794; the gathered wisdom of three and twenty years.' With somewhat more hardihood than prudence, his biographer has attempted to define the character of this work as a philosophical composition, and to appreciate its speculative merits and its practical utility. It cannot be disputed that the work is enriched with a vast variety of curious, though too often doubtful and incautious statements of fact, and that it everywhere displays uncommon powers of ingenious combination; but we are by no means prepared, with Miss Seward, to extol it as a model of philosophical investigation, or to recommend it to the daily and nightly meditation of the youthful student.

Before he quitted his residence at Lichfield, Dr Darwin formed a botanical society, consisting of three persons,—which, we believe, is held to be the *minimum* of a body corporate. The two other members were Sir Brooke Boothby and a proctor of the
name

name of Jackson, whom Miss Seward has characterised as 'a would-be philosopher, a turgid and solemn coxcomb;' but who was the chief operator in the translation of the Linnean System of Vegetation, which was published in the name of this society. 'His illustrious coadjutors exacted of him fidelity to the sense of their author, and they corrected Jackson's inelegant English, weeding it of its pompous coarseness.'

It was about this time also that Dr Darwin first became acquainted with Mrs Pole of Radburn, who was the object of what Miss Seward has called 'the Petrarchan attachment of his middle life, more happy in its result than was that of the bard of Vacluse.' It was in consequence of his marriage to this lady in 1781 that he removed from Lichfield to Derby; and it was to her, in her married or widowed state, that he addressed several copies of verses, which have since been circulated in periodical publications. But these, with the whole history of this tender attachment, and various other matters of a more digressive and extraneous nature, we are compelled to leave without further notice.

From the period of his quitting Lichfield, Miss Seward does not attempt to give more than a slight outline of the domestic history of Dr Darwin. The completion of the task is reserved, we are told, for 'his some time pupil, and late years friend, the ingenious Mr Dewhurst Bilsborrow, who is now writing, or has written, his life at large.' Her information relative to this latter period is avowedly imperfect; and it is to be regretted, that, with better opportunities within her reach, she should have suffered herself to be misled by erroneous report. In the year 1799, Dr Darwin had the misfortune to lose his eldest son, in circumstances extremely distressing. On first perusing the account given by Miss Seward, of the 'stoical fortitude' of the father, we were certainly much shocked, and could have pardoned his biographer for a less rigid adherence to the duty of speaking the whole truth. We are pleased now to find, that the statement is partly erroneous, and are happy to afford Miss Seward the present opportunity of correcting it.* We now turn

* The following note has been communicated to the Editor of this Review.

'The author of the *Memoirs of Dr Darwin*, since they were published, has discovered, on the attestation of his family, and of the other persons present at the juncture, that the statement given of his exclamation, p. 406, on the death of Mr Erasmus Darwin, is entirely without foundation, and that the Doctor, on that melancholy event, gave, amongst

turn to the account which she has given of the poem of 'the Botanic Garden,' of which an elaborate analysis and criticism occupies nearly a half of the volume.

About the year 1777, Dr Darwin had purchased 'a little, wild, umbrageous valley,' in the neighbourhood of Lichfield, which he cultivated with great taste: aiming, as Miss Seward expresses it, 'to unite the Linnean science with the charm of landscape.' On her first solitary visit to 'this luxuriant retreat, with her tablets and pencil, and seated on a flower bank,' Miss Seward wrote a little poem of about fifty lines, addressed to Dr Darwin, under the character of the genius of the place; in praise of which, it is enough to say, that, with some alterations, it was afterwards adopted, without acknowledgment, as the introduction to the first canto of 'the Botanic Garden.' This we consider as the most curious anecdote in the volume before us; and the correctness of the statement is placed beyond a doubt, by the appearance of her verses as such in the periodical publications of the year in which they were written.

According to Miss Seward's account, it was the perusal of her lines that suggested the idea of a great poem 'on the Linnean system.' The composition of it was begun very soon afterwards, but advanced so slowly, that ten years elapsed before the date of publication. By 'an inversion of all custom,' the second part was first given to the world in 1789; from a consciousness, as Miss Seward supposes, that, in a new and unusual style of poetry, 'the loves of the plants' would be more likely to secure immediate popularity, than the bolder conceptions, and still more splendid imagery of 'the Economy of Vegetation.'

The long and elaborate analysis of these poems, which Miss Seward has thought fit to give, will, by many readers, be considered as prolix and uninteresting. They are certainly disproportioned to the bulk and nature of her work, if a work so immethodical and desultory can be tried by ordinary rules; but at the same time they will be found interspersed with many critical

amongst his own family, proofs of strong sensibility at the time, and of succeeding regard to the memory of his son, which he seemed to have a pride in concealing from the world. In justice to his memory, she is desirous to correct the misinformation she had received, and will therefore be obliged to the Editor of the *Edinburgh Review* to notice the circumstance in the criticisms of the book, since, unless a second edition should be called for, she has no means so effectual of counteracting the mistake.

critical remarks, which display great justness of poetical taste and feeling.

We have * formerly had occasion, at sufficient length, to state our conceptions of the peculiar character and merit of Dr Darwin's poetry; and at present it is not our intention to resume the subject in the point of view under which it was then considered. In truth, the opinions entertained by his biographer, and by those whose criticisms she has adopted, coincide so nearly with those which we had expressed, that there is nothing to justify or provoke a farther discussion. In one respect, however, we feel ourselves compelled to dissent from an opinion entertained by most of the admirers of Dr Darwin, and by none more firmly than Miss Seward. 'One extraordinary, and in a poet of so much genius, unprecedented, instance of plagiarism accepted,' says Miss Seward, 'not one great poet of England is more *original* than Darwin. His design, his ideas, his style, his manner, are wholly his own.'

If it were asked in what chiefly consists the originality of manner which is supposed to characterise the new Darwinian school of English poetry; it would probably be answered, in the *first* place, that the general design of clothing the philosophy of natural history in the gay attire, and with all the higher graces of poetry, was novel, at least in any English poet; in the *second* place, that his picturesque style of poetical description, sustained by bold personifications and metaphors, addressed exclusively to the eye, is, in a great degree at least, his own; and, *lastly*, that, in the loftiness of his laboured and inverted diction, and in the stately march of his highly polished versification, there are peculiarities of manner which it may be difficult to describe, but which must at once be felt as distinguishing him widely from his great predecessors in English poetry.

It is not our intention to arraign Dr Darwin of literary depredation on the property of others, of the felonious kind complained of so justly by Miss Seward; nor shall we venture dogmatically to assert, that this peculiar manner to which he has bequeathed his name, was formed on a servile imitation of any existing model. It is true, notwithstanding, that for nearly seventy years there has existed, in obscurity and neglect, a philosophical poem in the English language, stamped incontrovertibly with all those peculiar characters of the *Darwinian school* to which we have alluded. It is that obscurity and neglect alone which could have exempted Dr Darwin from the charge of hav-
ing

* Review, NO. IV. Art. XX.

ing imitated an unsuccessful original; and although it may possibly be true that the poem in question was unknown to him, it will at least become necessary hereafter to date the origin of the *school* at an earlier period.

The poem was published * anonymously in the year 1735; and of its author we have not obtained any information. It is entitled '*Universal Beauty*;' and its general object is an exposition of whatever is beautiful in the plan and economy of the universe in all its parts. In the prosecution of this object, the author takes a very wide compass; and the general laws which bind the planetary system, the physical laws which peculiarly regulate the globe which we inhabit, the phenomena and provisions of the mineral, the vegetable, and the animal kingdoms, are all brought under poetical review; and the more remote and fanciful allusions of the text are illustrated by a series of philosophical notes. That the resemblance does not stop here; but extends still more strikingly to the other characteristic peculiarities of '*the Darwinian manner*,' may be most effectually illustrated by a few extracts, taken at random.

In the third part, which contains a '*survey of vegetable nature*,' after tracing the analogy of animal and vegetable life, we have the following lines, in illustration of '*the various provisions of nature, for protecting and supporting the indigent, as the strawberry, cinque-foil, &c.; and supporting the feeble, as the vine, bryony, ivy, &c.; and thus equally propagating and spreading a universality of delights, pleasures, and enjoyments.*'

Thus mantling snug beneath a verdant veil,
The creepers draw their horizontal trail;
Wide o'er the bank, the plaatal reptile bends;
Adown its stem, the rooty fringe depends,
The feeble boughs with anch'ring safety binds,
Nor leaves precarious to insulting winds;
The tendrils next of slender, helpless size,
Ascendant thro' luxurious pamp'ring rise; -
Kind nature soothes their innocence of pride,
While buoy'd aloft the flow'ring wantons ride,
With fond adhesion round the cedar cling,
And wreathing, circulate their am'rous ring,
Sublime, with winding maturation grow,
And clench'd retentive gripe the topmost bough;
Here climb direct, the ministerial rock,
And clasping firm, its steepy fragments lock;

Or

* '*Universal Beauty, a Poem.*' London: J. Wilcox. 1735. Folio. It consists of six parts, published successively, containing each about 400 lines.

Or various, with agglutinating guile;
 Cement ténacious to some neighb'ring pile;
 Investing green, some fabric here ascend,
 And clust'ring, o'er its pinnacles depend.'

Part III. l. 271-290.

In allusion to those plants which are supposed to obey the influence of the sun and moon, we find the following lines:

' Here winding to the Sun's magnetic ray,
 The solar plants adore the Lord of Day;
 With Persian rites idolatrous incline,
 And worship towards his consecrated shrine;
 By south, from east to west, obsequious turn,
 And mov'd with sympathetic ardours burn.
 To the averse, the Lunar sects dissent,
 With convolution of opposed bent;
 From west to east by equal influence tend,
 And towards the Moon's attractive crescence bend;
 There nightly worship with Sidonian zeal,
 And Queen of Heaven, Astarte's idol hail.'

Part III. l. 313-324.

We regret that our limits do not admit of the author's description (Part IV. l. 120-204.) of the circulation of the blood in animals, illustrated by a picturesque analogy to the motions of the fluid parts of the globe. The following lines, taken from Part V. refer to that species of insects which, like the beetle, 'by a surprising machinery of little springs and hinges, erect the smooth covering of their backs, and unfolding their wings that were most neatly disposed within their cases, prepare for flight.'

' Or who a twofold apparatus share,
 Natives of earth, and inhabitants of air,
 Like warriors stride, oppressed with shining mail,
 But furl'd beneath, their silken pennons veil.
 Deceived our fellow reptile we admire
 His bright endorsement and compact attire,
 When lo! the latent springs of motion play,
 And rising lids disclose the rich inlay;
 The tissu'd wing its folded membrane frees,
 And with blithe quavers fans the gathering breeze;
 Elate tow'ards heav'n the beauteous wonder flies,
 And leaves the mortal wrapp'd in deep surprise.

So when the guide led Tobit's youthful heir,
 Elect, to win the sev'n times widow'd fair,
 Th' angelic form, conceal'd in human guise,
 Deceiv'd the search of his associate's eyes;
 Till swift each charm bursts forth like issuing flame,
 And circling rays confess his heav'nly frame;

The zodiac round his waste divinely turns,
 And waving radiance o'er his plumage burns ;
 In awful transports rapt, the youth admires,
 While light from earth the dazzling shape aspires.'

Part V. l. 127-146.

We cannot refrain from giving a part of this writer's description of the creation of these planetary systems of which the universe is composed. It is a favourite topic with both poets.

Swift roll'd the spheres to their appointed place,
 Jocund through heaven to run the various race ;
 Orb within orb in living circlets turn,
 And central suns through every system burn ;
 Revolving planets on their gods attend,
 And towards each sun with awful reverence bend ;
 Still towards the loved, enlivening beam they wheel,
 And pant, and tremble like the amorous steel.
 They spring, they revel in the blaze of day,
 Bathe in the golden stream, and drink the orient ray ;
 Their blithe satellites with lively glance
 (Celestial equipage) around them dance ;
 All, distance due, and beauteous order keep,
 And spinning soft, upon their centres sleep.'

Part I. l. 91-104.

Similar passages might easily be accumulated, but these may serve as a specimen of the peculiar manner of this forgotten poet. Of its resemblance to that of Dr Darwin, we shall leave our readers to judge. That there are obvious shades of difference, we have no hesitation to admit; nor do we call in question the decided superiority of the latter. The poem of 'Universal Beauty' is indeed extremely unequal: passages occur which are worthy of Sir Richard Blackmore; and in others there may be discovered an unsuccessful effort to imitate the fashionable anti-thetic manner of Pope. Whether or not the poetry of Darwin would, in the age of Pope, have incurred the same hazard of neglect with that of the writer whom we have ventured to exhibit as his prototype, we shall not presume to conjecture.

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STATEMENT OF FACTS RESPECTING THE FIRST PUBLICATION OF
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IN our Review of the 'Works of Lady Mary Wortley Montagu,' (No. IV. p. 512.), we laid before our readers the account given by Mr Dallaway of the first publication of these celebrated Letters. It is remote from our plan to enter into controversy on a subject of this nature; yet we cannot refuse a place to the statement of facts contained in the following letter from Miss Sowden, the daughter of the very respectable clergyman alluded to by Mr Dallaway.

' TO THE EDITOR OF THE EDINBURGH REVIEW.

' SIR,

BATH, January 31. 1804.

' As you have noticed the new edition of 'Lady Mary Wortley Montagu's Works' in your Review, No. IV. and there quoted a strange story given by the editor, as a recent and curious discovery; you will, I hope, permit me, through the medium of your widely circulating Journal, to pronounce it an idle fabrication, as void of foundation, as of probability;—No person having ever been sent by the late Countess of Bute to my father, and no one having ever imposed on him,

him, by stealing a copy of the MSS. in his possession. So far is this last assertion from being true, that, though he lived twenty years after their publication, he never had the smallest clue with which to trace the by-way path through which they got into print.

‘ The following are facts, which I have too frequently heard repeated by my father, not to be able to state accurately.

‘ At the close of the year 1761, Lady Mary Wortley Montagu, passing through Holland in her way to this country, was detained many weeks at Rotterdam by a severe frost. My father was one of a few literary men, who, after paying his respects, frequently repeated his visits to her Ladyship. In one of these visits, Lady W. M. lent him these celebrated letters for his perusal; and on his returning them, expressed a great desire of having a fair copy taken, mixed with some fears of confiding them to any one of whose probity she was not previously well assured. My father, considering this as an indirect mode of application to himself, offered faithfully to transcribe and return the original and copy to her Ladyship as soon as completed. She gladly accepted this proposal in part; but added, that the MS. in her own handwriting should be his, and at his entire disposal.

‘ My father, however, reflected that a gift of that magnitude might draw after it suspicious unfavourable to himself, and on this account declined its acceptance. Upon which her Ladyship said, ‘ If that be all, Mr Sowden, I will soon make you easy;’ and taking her pen, wrote on the cover the words contained in the *fac simile*.

‘ The copy was not completed when Lady M. W. M. died; and no sooner was the event known to my father, than he prepared a letter for the Countess of Bute, to inform her of the MS. in his hands, and of his intention to publish it; not thinking it correct to proceed otherwise. But before this letter could be dispatched, he received one from her Ladyship, stating, that by some letters of his, which she had found among the papers of the deceased, she perceived there were such MSS. in his hands; which she requested might be transmitted to her without delay. The answer informed her Ladyship, that though she was right as to the fact, she misapprehended the tenure by which he held those letters; which was not as a deposit, but as a gift: In proof of which, he inclosed a copy of the deed of gift. Still her Ladyship persisted in her desire to have them; and, in her reply, asked, ‘ *What he must have for them?*’ But my father, little accustomed to make bargains, sent them, original and copy, contrary to the advice of some of his mercantile friends, to Lady Bute, without stipulating for terms; saying, he made no difficulty of relying on her Ladyship’s generosity.

‘ Several weeks now elapsed, and he heard no more. At length, he was informed, that an order was given to her banker to pay him three hundred pounds. At this juncture, the work was advertised—and the order stopped.

‘ When my father saw the work announced in the public papers, he concluded it came from the family; while Lady Bute had doubtless,

on her part, suspicions unfavourable to him. These, however, were soon done away, and the three hundred pounds paid.

‘ About a dozen years since, a gentleman, to whom I had mentioned the above particulars, informed me, with an air of confidence which inclined me to credit his narrative, ‘ That the Countess of Bute had entrusted this MS. to a Noble Duke, now no more, for his opinion, previous to its being made public. His grace was at that time connected with a gentleman (from whom he afterwards saw reason to disengage himself), whose general character it was, through life, to be both querulous and necessitous, though by no means deficient in understanding or talents. To his address, on the one hand, and small scrupulosity on the other, it was said, the public owed the first appearance of these Letters, for which he, no doubt, received a considerable remuneration.’—But whether this be, or be not, as was related, in the preceding statement, I am perfectly certain there is no error; and the facts it contains are as well known to one of the most respectable characters now living as to myself;—I mean the Reverend Dr A. Mac-laine, who was at that time resident at the Hague, and is now at Bath.

‘ Hoping this may obtain an early attention,

I remain, Sir,

‘ Your very humble Servant,

‘ HANNAH SOWDEN.’

No. VIII. will be published on Wednesday 18. July 1804.

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THE
EDINBURGH REVIEW,
JULY · 1804.

N^o VIII.

ART. I. *Euclidis Elementorum Libri Priores XII. Ex Commandini et Gregorii Versionibus Latinis. In usum Juventutis Academicæ. Edidit, pluribus in locis auxit, et in depravatis emendavit Samuel Episcopus Rossensis. Oxonii, e typographeo Clarendoniano. 1802. 8vo.*

Euclidis Datorum Liber cum additamentis, necnon Tractatus alii ad Geometriam pertinentes. Curavit et edidit Samuel Episcopus Asaphensis. Oxonii, etc. 1803. 8vo.

IT will readily be conceived, that when we propose to review any of the works of Euclid, it is the editor, not the author, who is to be the subject of animadversion. A geometer who has stood the test of more than two thousand years ; who has resisted the attacks of so many critics, and supported the weight of so many commentators ; whose writings kept alive the sacred fire of science when it was almost extinguished over the whole earth, and now shine with undiminished lustre amidst the greatest splendour of scientific discovery—such an author is not to be moved by the praise or the censure of modern criticism ; his place in the Temple of Fame is irrevocably fixt, and nothing remains for us but to hail him as one of the immortals.

But the high privileges to which such an author may justly lay claim, do by no means descend to his commentators, who, on the other hand, incur a responsibility in proportion to the value and dignity of the work which they undertake to explain, and cannot be permitted to connect their names with one that is already illustrious, without satisfying the world that they have a title to so high a distinction. Such a title, indeed, many of the commentators on Euclid are well prepared to support : and, not to mention Theon and Proclus among the ancients ; among the moderns, Commandine, Clavius, Gregory, Barrow, and, last

of all, Simson, have claims to public gratitude which will be always recognized. The latter, in particular, has restored that part of the elements which he undertook to explain, to more, we are well convinced, than even its original excellence; and has not only purified it from the errors which editors and transcribers had introduced, but has even cleared it from some mistakes into which it would seem the author himself had fallen. His edition of Euclid has accordingly been well received all over Europe; it is held in the highest estimation; and an author who has written to excellent purpose on the elements, as well as on the higher branches of the mathematics, has remarked that the publication of it ought to be regarded as an important event in the history of geometry. (*La Croix, Elemens de Geomet. Disc. Prel. 27.*) This, however, is not the opinion of the editor now before us, who often censures Simson with much asperity; but with what reason will appear more fully as we proceed.

Dr Horsley has already essayed his skill as an editor in more than one instance. His first attempt, if we mistake not, was made on Apollonius's Books of Inclinations, in which he was more than a mere editor, having restored that work from a short account of its contents that had been accidentally preserved in the Mathematical Collections of Pappus. In this, though it required more than the usual exertions of a commentator, no very great difficulty presented itself; and Dr Horsley acquitted himself very much to the satisfaction of geometers.

His next attempt was infinitely more arduous, and the success that attended it was infinitely less. This was a complete edition of the works of Sir Isaac Newton, accompanied with notes; a work requiring the exertion of uncommon talents, and accompanied with difficulties which Dr Horsley was by no means prepared to overcome. Indeed, we know of no literary project, even in this age of literary adventure, of which the failure has been more complete. The reader, at every step, must desiderate not only the extensive information, the philosophic views, the profound skill in geometry, but also the patient and elaborate research which were indispensable in so great a work. Those elementary parts of which Newton has sometimes condescended to treat, are enlarged on by his commentator at considerable length; but in the great and immortal books, where every word, almost, supplies matter for profound investigation, you may turn over many pages without meeting with a single remark. What wants elucidation the most, is the least treated of; the difficult parts of the new analysis are not explained; the views that guided Newton in his discoveries are not unfolded, nor the effects which those discoveries have produced; the corrections, the enlargements,

ments, the improvements, that have been made on them after a hundred years of laborious and profound investigation—concerning all these, the most perfect silence is observed. No hint escapes to make us suppose that the editor was acquainted with this part of his subject; and for any thing that his commentary contains, it might have been written the year after the book of the *Principia* was published. It can indeed stand in no comparison, for utility, with that of *Le Sieur* and *Jaquier*, and still less, for elegance, with that of *Madame Chastellet*. The whole carries with it the air of a work undertaken without due preparation; carried on with little industry or ardour, and abandoned, in effect, long before it was brought to a conclusion. A philosopher,* who has pursued the discoveries of *Newton* the farthest of any of his successors, has said, that a commentary on the *Principia* of *Newton*, such as it deserves to have, will hardly do less honour to the age which produces it, than that work itself did to the seventeenth century. We are well convinced of the truth of this remark. The glory of accomplishing so great a work is a noble prize, still left to posterity, to contend for.

In the volume now before us, as the learned *Bishop* had not to encounter the same difficulties, he is not chargeable with the same defects; and it will be readily acknowledged, that he made a far juster estimate of his powers, when he undertook to comment on the *Elements* of *Euclid*, than when he began to interpret the *Principia* of *Newton*. Yet there are, we doubt not, who will be of opinion, that the praise due to both works may be expressed nearly in the same words, and that their merit consists in being fuller and more elegant editions than are usually to be met with.

The edition of *Euclid* now offered to the public, consists of the first twelve books of the *Elements*; it is elegantly printed, and does credit to the *Clarendon press*. The translation followed in the first six books, and in the eleventh and twelfth, is that of *Commandine*, according to *Keil's* edition; in the other four books, *Gregory's* translation is given, from the *Oxford* edition of the works of *Euclid*. Though the whole is intended for the instruction of students in geometry, those who are more advanced will certainly be well pleased to have a good modern edition of so many of the books of *Euclid*, and will probably only regret that the whole was not given in the same neat and commodious form. With respect to the advantages of this edition for the purpose of academical instruction, we can by no means agree with the editor: in the books usually taught, it has not any peculiar merit; and

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* *La Grange*.

with regard to the four books here introduced, we are clearly of opinion, that they cannot be made a part of an elementary course, without turning the attention of the student away from more important branches of the mathematics.

We must, however, hear what Dr Horsley has to say on this subject.

‘Primo igitur, plerique eorum, qui in usum studiosæ Juventutis Euclidem ediderunt, secus ac nos fecimus, non nisi priores sex libros cum undecimo et duodecimo typis mandârunt; partim, ut opinamur, quia facile sibi persuaserint, septimi, octavi, et noni nullam eos jacturam facturos esse, qui vel in puerorum scholis, vel a quocunque demum præceptore arithmeticæ elementa didicerint; partim quia omnem libri decimi utilitatem parvi penderint, præ surdorum doctrinâ, prout ab iis exponitur qui artem algebraicam tradunt—quod inerudite magis factum sit, nescio, an oscitanter; *tam a ratione alienum est, juniores ad algebram amandare, priusquam geometriæ elementa rite caluerint, e quibus pendet etiam regularum algebraicarum sive veritas omnis sive evidentia.* Etenim has ut artem quandam, si placeat, absque geometriâ quis condiscat; ut scientiam non intelliget, nullâ geometriæ ratione habitâ, quæ et ea amplectitur, e quibus generale numerorum affectus exoriri compertum est.’ *Præf.* p. 2.

It is plain from this, that Dr Horsley considers the books of Euclid, usually taught in the schools, as not laying a sufficiently broad foundation for mathematical instruction; and for that reason would introduce the seventh, eighth, ninth, and tenth, as necessary for demonstrating the rules of arithmetic and algebra—the two last are to be considered as arts rather than sciences, which do not explain their own principles. To these positions, however, we by no means assent. With the imperfect numeral characters which the Greeks possessed, it would be singular, indeed, if their methods of unfolding the properties of number were better than those of their successors, furnished with an arithmetical notation, which, if any thing that men possess may be called perfect, is deserving of that epithet, and having besides the noble invention of algebraic language. The truth is, that the ancients wanted so much the means of simplifying the operations of arithmetic, that they proved, with considerable difficulty, many truths which a better mode of expression has reduced to the class of self-evident propositions. It cannot be said, with any good reason, that arithmetic and algebra do not possess the power of demonstrating their own principles and rules. Sufficient care in explaining the fundamental operations of those sciences, may not always be taken by those who have written of them. This, however, is not the fault of the science, but of the writers on it; and it is, besides, a censure that is by no means general. Dr Horsley says, it is absurd to send young men to study algebra

bra before they have learnt the elements of geometry, on which depends the truth or evidence of all the algebraic rules. To us, again, it seems certain, that algebra can demonstrate its rules, just as well as geometry. The sciences both reason concerning quantity; the ideas, in both, are equally clear and well defined; they make use of the very same axioms; and, therefore, that the conclusions of the one should be more certain than those of the other, what reason can possibly be assigned? Indeed those mathematical reasonings, into which no idea of position is introduced, are not, strictly speaking, geometrical; they are mathematical; and if the arithmetic symbols are used, which will in general contribute much to render them clearer and more concise, they become algebraic. The reproach, therefore, thrown against this science is ill-founded, and is injudicious; being calculated to diminish the attention paid to a part of mathematical learning that is of the very first importance. Farther, it is so far from being absurd to begin the study of the mathematics with algebra, rather than geometry, that it has been the practice to do so with some of the nations who have made the greatest progress in mathematical learning. One very great disadvantage that would necessarily arise from forcing the student of mathematics to read the seventh, &c. of the elements, is, that it would detain him long in the study of synthetical reasonings, when he ought to be applying his mind to those that are analytical, and that lead to understand the methods of investigation. The sooner that the former method is abandoned for the latter, the sooner are the powers of invention called into action, and the more speedily do we acquire, not merely the knowledge of truth, but the capacity of discovering it. As all the demonstrations in Euclid are synthetical, the time spent in the study of those books we now speak of, would be far better bestowed in gaining a knowledge of the analytical investigations of algebra. It cannot indeed be denied, that many of the fundamental truths of algebra might be better proved than they are in some of the books of that science; but this might certainly be done without abandoning the analytical methods, and without consuming time in the study of demonstrations which, even when fully understood, would not put the learner in possession of the principle on which they were discovered.

Too great an attachment to such demonstrations is perhaps one of the chief reasons why the mathematical sciences have been for a long time so stationary in this country, compared with what they have been among our neighbours on the Continent. If there be any truth in this remark, the plan recommended by the Bishop of Rochester would tend greatly to retard the progress of science

amongst us, and to increase an evil, of which the magnitude is already so much to be regretted. It is to be hoped, therefore, that they who have the care of the studies of the young men at the universities, will not hastily suffer themselves to be led away by the confidence with which Dr Horsley delivers his opinion on this subject. The work, however, contains a fuller collection than usual of the books of Euclid; and will, for that reason, be very agreeable to those who are already versed in mathematical studies, though, we apprehend, not very useful to those who are only beginning them.

But, waving the consideration of the purpose, we are now to examine the execution of this work, and in what respects the editor has improved on those who went before him. He professes to have taken no assistance from them, more especially from Simson.

'Quæcunque autem sint ea, vel qualesquales, quæ in editione hæc nostrâ fecimus emendationes, ducem in plerisque eorum SIMSONUM certissime non secuti sumus. Illud nobis propositum fuit unice in Euclide emendando, Euclide ipso duntaxat magistro uti, per omnia intueri eum, et ad illius mentem quantum fieri potuit omnia componere.—Immo hoc ipsum erat ut rem non diffiteamur quod primo omnium ad Opus hoc nostrum excitavit nos, certa nimirum, et nunquam immutata opinio, Euclidem a Simsono sermone Anglico donatum juventutis academicæ institutioni non sufficere, aut satis fideliter veterum geometrarum methodum, quæ nunquam non *ἀκριβέστατη* est, iis in conspectu ponere.' (Pref. ad fin.)

The maxim, of employing only Euclid for the purpose of elucidating Euclid, seems at first sight to be highly commendable, and to promise something very genuine and unsophisticated. This, however, is a hollow and deceitful appearance; for, in fact, no rule of criticism can be more injudicious and unsound. It is one which, if uniformly pursued, must prevent the accumulation of learning and knowledge; and, instead of placing every scholiast on the shoulders of the preceding, would oblige him to begin his work anew, and execute the whole for himself. Had all men been vain enough to follow this maxim, the remains of antiquity, dug out from under the ruins of the barbarous ages, would not have gradually assumed all the perfection and elegance of the original compositions; and the classics in the days of Heyné would have been in no respect better than those of Chrysoloras. A few giants in literature may have been entitled to guide themselves by the rule; but even they would have done more honour to themselves by the *breach* of it, than the *observance*. Such pretensions are much more likely to attend want of industry and patience in research, or an excessive self-confidence, than to accompany the possession of real talents. But we must not censure

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Dr Horsley too severely on this ground ; for it will perhaps appear, that he has adhered less scrupulously to his rule, than the preceding passage might lead us to imagine.

As to what particularly regards Simson in the above passage, we acknowledge that the constant attacks made by the learned Bishop on that excellent geometer has excited our surprise, and often our indignation. As an adept in the ancient geometry, a commentator on Euclid, and the restorer of Apollonius, Simson has merited the highest praise. The spirit of the ancient geometry was known to him in its full extent ; he studied it with industry and zeal ; and possessed more power over it, as an instrument for the discovery of truth, than any man of the present age, if we except his pupil and friend, the late Dr Matthew Stewart. Of this, his restoration of the *Loci Plani*, the Problems in his Conic Sections, and his restoration of the Porisms of Euclid, bear ample testimony. His Euclid, though not admitting, like the works just named, the same exertion of original and inventive powers, is a model for the accuracy of its reasonings. What Dr Horsley refers to, therefore, when he speaks of it as giving but an imperfect idea of the extreme accuracy of the ancient geometry, we are unable to comprehend. Had he contented himself with saying that Simson is now and then prolix, and that his notes are sometimes unnecessary, we could have seen reason for what he said, at least in a few cases ; but of this we cannot find a single instance to justify the remark. As he has not specified what he meant particularly to speak of as destitute of geometric *acumen* in Simson, we cannot know precisely at what point the defence should be made ; but we shall proceed to consider on what his own pretensions to superior accuracy are founded.

For that purpose we must look particularly into those parts where the elements of geometry involve some difficulty in them ; and if Dr Horsley has got over those in a more masterly way than any other editor, the ostentatious display in his preface will more easily be forgiven.

One of the first questions that has usually exercised the ingenuity of the editors of Euclid, and the writers on elementary geometry in general, relates to parallel lines. It is easy to shew, that two lines having certain relations in their position with respect to another line, will never meet ; but it is very difficult, from the mere negative consideration of two lines not meeting, to show what relation of position they must necessarily have to a third line. Euclid himself could find no other method of doing this, than by introducing an axiom, which almost every body has objected to as wanting one very essential property of an axiom, that of self-evidence. Mathematicians have therefore exerted them-

selves, in a variety of ways, to remove this difficulty, some with more, and some with less success; but none in a manner that has given entire satisfaction. It has, however, we think, fared worse with nobody in this matter than our author. Euclid had laid it down as an axiom, that lines which make with a third line the two interior angles less than two right angles, must meet, if produced; and this proposition Dr Horsely endeavours to demonstrate; but he does so by a process of reasoning which involves another axiom taken for granted without being expressed; this is, that lines which incline toward one another, or have, as he calls it, their directions *ad se invicem*, must meet, if produced; where not only a new axiom, but also a new definition (that of the words inclined *ad se invicem*, or toward one another) is implied. Now, if this definition be supplied, the axiom just mentioned will be found the very same with that of Euclid, that is, with the proposition which it was Dr Horsley's purpose to demonstrate: His demonstration is therefore nothing more than a begging of the question, concealed under the obscurity of a new and undefined expression. Such is the first example which he gives of geometrical precision, when he is fairly left to himself, and has not Euclid for his guide. Dr Simson has treated of this same subject, with considerable prolixity, we will acknowledge, and without any thing remarkably happy or ingenious in his demonstration; but in a manner perfectly logical and accurate. Indeed, we are fully persuaded, that if it had been proposed to that geometer to commit to the flames all that he had ever written concerning Euclid, or to insert the demonstration which Dr Horsley has given of this proposition, he would have submitted much more readily to the former than the latter mortification. The reader who will peruse with attention the corollary which Dr Horsley has annexed to the 28th of the first of Euclid, will not think that in these remarks we have done him any injustice.

In the beginning of the third book of Euclid, it is stated as a definition, that equal circles are those of which the diameters are equal. This, however, is evidently not a definition, but a theorem; and is very improperly given as a definition by Euclid, or, as is more probable, by some of his editors. Dr Horsley has made an axiom of it, and this also seems not very agreeable to strict logic; for, as it is capable of being proved, by laying the one circle on the other, and shewing that they may wholly coincide, so it ought to be proved in that manner, because the notion of equality has been before laid down as founded on the coincidence of magnitude; and no other idea of equality, but what is founded on this definition, and on the application to it of the other two axioms, that if equals are added to equals, or taken

taken from them, the results are equal, can ever be admitted into geometry.

The fifth book of Euclid, which treats of the subtle and difficult subject of proportion, is the part of the elements which has most exercised the skill and ingenuity of commentators, and has given rise to much dispute, not concerning the conclusions, but concerning the mode of reasoning which the Greek geometer has employed. In this part Dr Horsley considers himself as having made great improvements, though, when we compare his edition with Simson's, except in one particular, we are quite at a loss to perceive in what they consist. Yet, to hear him speak of them, one would imagine that, before his time, the fifth of Euclid was quite unintelligible: 'Siquidem omnia,' says he, 'a nobis ita disposita sunt ut tandem aliquando, *περὰ τινος ὁδοῦ καὶ τῶνδε* explicetur hæc definitionum series, impedita antea, et mire inturbata. Fac enim in iisdem periculum, prout apud alias elementorum editiones extant, et nihil inveneris, quod aut perspicuum, aut ad doctrinam utile, aut denique iis quibus interponitur satis consonum est. Rem ipsam deinde perpendito et subductis rationibus, quomodo ex salebris hæc quis se expediat aliter quam nos fecimus, ut opinor vix invenies.' Præf. 7. ad fin.) Considering what men they are who have undertaken to explain the matter in question before Dr Horsley, this may be considered as one of the most ample panegyrics which any mathematician, since the days of Cardan, has ventured to pronounce on his own performances. Yet we must acknowledge that, after following the directions here given to his readers, '*subductis rationibus*,' the alterations he speaks of seem all, except one, to be extremely immaterial.

This one, which seems of more importance than the rest, relates to the seventh definition, that of *greater* and *less ratio*, on which Dr Horsley makes a remark, which we believe to be just, but by no means new. The remark is, that ratio being a relation, and not a quantity, greater or less, equal or unequal, are not predicable of it; so that to speak of one ratio being greater than another, is a catechrestic expression. When we say, for instance, that the ratio of A to B is greater than that of C to D, we mean that A is greater than that magnitude which has to B the same ratio that C has to D. This is without doubt true in strictness; and the same observation is made, and very well illustrated, by Barrow in his Mathematical Lectures (lect. 20.), where he maintains against Gregory of St Vincents, Meibomius, Borelli, and others, that *ratio* is not *quantity*, and not strictly susceptible of greater and less; and he adds, that when one ratio is called greater than another, it is by a kind of catachresis

or metonymy, which is the same language that Dr Horsley has employed. Barrow, however, though he has said every thing on the subject of this definition, and the others that relate to proportion, which could be expected from a man of profound learning and great acuteness, has not proposed to make any change on the definition itself, nor on the demonstrations founded on it. Dr Horsley has changed the former to one which he thinks preferable to what is usually given as Euclid's: several demonstrations are changed in consequence of this, and they are perhaps in some respects improved; but they are certainly very different from the demonstrations of Euclid, and employ a postulatum which he has never admitted into the fifth book. This, however, is the only change of any importance, that Dr Horsley seems to have made in the doctrine of proportion; the advantage from it is at best but inconsiderable, and, at the same time, the alteration seems rather to exceed that which a commentator has a right to make on his author's text.*

In the sixth book nothing occurs that requires to be taken notice of. The four books that follow are given with very little change from Gregory's folio edition.

In the eleventh and twelfth, where solids are treated of, the books of Euclid have been thought to require some alteration. In this part, the Elements have been much indebted to Simson, who first shewed that Euclid's idea of equal and similar solids was not accurate. Euclid holds those solids to be equal which are contained by the same number of similar and equal plane figures; and yet it can be shewn, that solids may be unequal in any proportion, though contained by such planes. This error was first pointed out by Simson; and Dr Horsley, without taking any notice of that circumstance, corrects Euclid's idea nearly as he had done. The great accuracy of Simson was eminently shewn in this part of the Elements; and he was the first who delivered the method of comparing solids with strict geometric accuracy. It is curious that this honour should have remained for a geometer who wrote so late as Simson; and it is not a little extraordinary, that any one should now treat of the same subject, and avail himself of all his improvements, without taking any notice of the person by whom they were first suggested. This may be what Dr Horsley means, when he says,

* *Simsonum*

* Euclid gave no definition of compound ratio, though he uses the expression, and though it is certainly one that required to be explained. Dr Horsley follows Euclid in this, which is surely a defect; but, to have done otherwise, he must have followed Simson.

‘*Simsonum ducem minime secuti sumus.*’ Not to acknowledge a leader, may certainly be said, not to follow him.

In the twenty-sixth of the eleventh it is proposed to make a solid angle equal to a given solid angle, at a point in a given line. Of this problem, Euclid himself has given a very imperfect, and indeed a faulty solution, for which Simson substituted another, quite accurate, but not very happily conceived, nor so extensive as the nature of the thing requires. Dr Horsley has been more successful in correcting this error; he has given a very simple and general solution of the problem; and this superiority he does not leave the reader to discover, but announces it with no small exultation. ‘*Problematis de quo agit propositio libri XI. vicesima sexta, solutionem adjecimus uberiolem multo, quam quæ ex angustis suis principiis a Simsono prolata est.*’

Now, though it is true that Dr Horsley's solution is more elegant and more general than Simson's, this superiority might have been announced in less offensive terms. The problem is by no means of great difficulty; it admits of several solutions, some of them even more simple than that of Dr Horsley; but nothing that relates to so easy an investigation can decisively mark the genius of the inventor. A geometer, because his solution was not the best or most elegant, should not be charged with a limited and imperfect knowledge of the principles of his own science. Indeed, we are at a loss to know what is here meant by the *angusta principia* of Simson. His notions with regard to mathematics in general, might in some respects be accounted narrow and confined: he entertained strong and unreasonable prejudices against the algebraic methods of investigation, and seemed continually jealous of the encroachments which a barbarous rival (as he thought it) was every day making on his favourite science. This is confessed on all hands; and to such prejudices the phrase above quoted might not improperly be applied. But here the question is only concerning a matter of pure geometry, in which the extent and fertility of his genius were never before questioned. The truth seems to be, that his excellence in this science was too great, to allow his defects to be easily passed over.

On the subject of the eleventh book, we must also remark, that Euclid, contrary to his custom, and not very consistently with the rules of sound logic, has given two definitions of a solid angle, of which one only is retained by Simson. The definition retained is, that a solid angle is that which is formed by the meeting in a point of several plane angles which are not in the same plane. The other definition is, that a solid angle is the mutual inclination of more than two straight lines which meet,

meet, but are not in the same plane. Dr Horsley, in the spirit of which we have seen so many examples, remarks,

‘Inscite admodum Simsonus definitionum anguli solidi, quas duas Euclidis posuit, alterâ repudiâtâ alteram illam retinere maluit quæ vel minus universalis est, vel si aliter, ea saltem de quâ universalem esse, non equè manifestum est.’

This, we will hesitate to say, is a very uncandid criticism. There could be no reason for retaining both definitions, as they either meant the same thing, or they did not: If they meant the same thing, one of them *might* be rejected; if they meant different things, one of them *must* be rejected, otherwise we must call different things by the same name. Simson, finding himself in this dilemma, retained the definition which most readily presents to the mind that idea of a solid angle, which is the subject of investigation in the Elements. Dr Horsley alleges that the other definition is more general, and that Euclid may have meant to include the vertex of a cone, or of any surface that terminates in a point, under the notion of a solid angle. But of this we have no proof; for nothing is more certain, than that he never takes the words *solid angle* in such a sense, in any part of the Elements. Indeed, to have done so, was quite unsuitable to the usual accuracy of his language. If he had ever called a cone by the name of a pyramid; if he had said that the circumference of a circle was but a polygon of an infinite number of sides; if ever he had made any such deviation from the rigour of geometrical language—he might also have said that a conical surface is made up of an infinite number of infinitely small plane angles. As he has never spoken in this manner, we have no reason to think that he ever meant to do so, nor would Dr Horsley, we believe, have ascribed to him that intention, but for the sake of accusing Simson of ignorance, *‘Inscite admodum Simsonus.’* Our belief, therefore, in the ignorance of the latter, and the candour of the former, seems to rest on a very slight foundation.

The other work announced at the beginning of this article, is the book of Euclid's *Data*, from the same editor, and with the addition of some mathematical tracts of his own. This book, as being the foundation of the geometric analysis, certainly deserves that the greatest attention should be exerted to give it to the public in the most perfect state. Some few inaccuracies seem to have entered originally into the composition of it. In the fourth definition, for example, as it stands in the Greek, and as it is given in the edition before us, there is without doubt an error; for it is there said that lines, points, and spaces, are given in position which preserve always the same situation. Now, if the word, 'given' were really taken in such latitude as this, (synonymous

(synonymous with constant or fixt) it would follow, as Simson has justly remarked, that a straight line dividing any given angle, in any given ratio, must be given in position, which is not true, because that position, though a thing determined in itself, cannot be found, except in a few cases, by plane geometry. This limit, therefore, is evidently implied, that the things proved to be given, must be found by the rules of plane geometry, that is, by constructions formed on the three postulates prefixed to the Elements. Dr Simpson, therefore, expressed this definition differently from what it is in the Greek; and said that points, lines and spaces are given in position, which have always the same situation, and which are either actually exhibited, or can be found. Even the addition thus made, is not sufficiently precise; for by being actually exhibited or found, is understood that they are found by the principles explained in the Elements.

Dr Horsley has paid no attention to these circumstances, but has followed exactly the Greek text, and has thus discharged one part of the duty of a commentator at the expence of another. A similar remark may be made on his demonstration of the second proposition, where, by leaving out a limitation which Simson had introduced, he has preserved the text, to the great prejudice of the sense.

In the general conduct of the book, however, little occurs to be censured, and not much to be praised, if we consider what others had done before. Simson's edition of the *Data* always appeared to us to be excellent, and to admit of very little improvement; and in this opinion we are confirmed by the work before us. Dr Horsley, indeed, has added a second book to the *Data*, and has given, in a separate tract, a selection of problems resolved by the geometric analysis. We doubt, however, whether the first of these is a work of real utility; not that we doubt at all that new geometrical truths have their value, in whatever shape they appear, but because they cannot always be proper for elementary instruction. Propositions of this nature may be multiplied without end; and it is necessary to make a selection of those that are of most extensive application, and are most frequently referred to, in order that the young geometer may retain them in his mind, and have them always ready to be applied. The great secret for preparing a young man to exert his talents in investigation, as well as in any thing else, is to send him out furnished with all the principles necessary to be known, but loaded with as few as possible of those that are not necessary, or that may be easily supplied by his own ingenuity. The truths or principles that are not every day called for, had better be supplied by the invention than the memory.

The

The utility of the other little tract just mentioned, the *De-lectus Problematum*, cannot be doubted. It is a work exactly of the kind that is most wanted as an elementary *institution* in this branch of science. The problems are in general well chosen, with ingenious and elegant solutions, laid down strictly according to the method of the ancient geometers.

Some remarks, that form a *scholium* at the end of the *Data*, contain an encomium on the geometric analysis, but tending too much to depress the algebraic. This should be carefully avoided; and, however sensible we may be of the great beauty and elegance of the former, and of the valuable effects produced by the study of it on the powers of the mind, we should not forget, that in the most general and difficult speculations of the pure mathematics, and in all the most important branches of the mixt, it is the latter only that can be employed to advantage. An accurate inquiry into the extent of their different provinces, and into the principles on which the difference between the two branches of analysis depends, are objects that well deserve the attention of mathematicians. Dr Horsley has not touched on that subject.

One of the tracts in this volume contains the re-invention of a sort of table, known by the name of the Sieve of Eratosthenes, which appears to be no other than a method of finding out the prime numbers. If the contrivance of the Greek geometer was the same with Dr Horsley's, which we think extremely probable, it was very simple, and consisted in ranging all the numbers, 1, 2, 3. &c. in a table, and effacing from that table, in succession, all the multiples of 2, of 3, of 5, 7, &c.; so that what remained must obviously be the prime numbers, or such as are not multiples of any other number. This device, though somewhat ingenious, is simple and obvious enough; so that we cannot acquiesce in the very high encomium which Dr Horsley bestows on it. 'Cribrum igitur Eratosthenis, lector benevole, jam tibi ut fruaris eo, in manus traditum est, non fictum aliquid aut adulterinum, sed quale ab auctore ipso olim illud concinnatum esse omnino existimandum est. Quin et illud te monitum esse velim, inter veterum mathematicorum inventa, vix in aliud quodvis te incidere posse, quod vel magis artificiosc, vel magis ad utilitatem (in iis saltem quæ calculo indaganda sunt) uspiam excogitatum est.'

Now, of the *great* ingenuity of this invention, we see no proof: Nothing is performed here, but what has been done, and that very nearly in the same way, by every one who ever set about forming a table of the divisors of numbers. The prime numbers have their places, in such a table, ascertained almost

almost exactly in the same manner as in the Sieve of Eratosthenes; and there seems hardly any arithmetical device more simple or more obvious. Yet Dr Horsley holds it up, in this passage, as one of the most ingenious and subtle inventions of the ancients in matters of arithmetic. To us it seems, on the other hand, that there is hardly a problem in all the thirteen arithmetical books of Diophantus, that does not display vastly more ingenuity and contrivance. The invention is useful, because, in many researches, it is of importance to distinguish the prime numbers. This, however, is the simplest problem which can be proposed with respect to these numbers, and throws no light at all on those that are more difficult. If a number, beyond the limits of the table of prime numbers, is given; to find whether it be a prime number, or not, is sometimes a work of much difficulty; and what is said here, will not help us to the solution of it. Were it proposed, for instance, to find whether 262657 be a prime number, we should find the investigation require some thought, and would derive no benefit from the Sieve.

The tract on the Sieve of Eratosthenes was published in the Philosophical Transactions many years ago, and is now republished, having, as the author informs us, been abridged and translated into Latin by the Dean of Christ-Church. He also expresses his thankfulness to Dr Jackson for assisting him in drawing up his prefaces; and adds, '*Particeps igitur laborum in laudis etiam partem veniat.*' Some will not doubt say, that as the labour has been but small, the glory must be little in proportion; but all will confess, that the less a morsel is, there is the more merit in dividing it with another; and that, on the present occasion, it is highly edifying to see these two great men sitting down contentedly to so meagre a repast.

The volume which we are now treating of, besides the tracts already enumerated, contains a book on Sphaericks, from the first and second of Theodosius, in which the propositions demonstrated are very elementary, and the whole not very interesting, as keeping at a great distance from any application to spherical trigonometry: Next comes the measure of the circumference of the circle, from Archimedes: And, lastly, Keil's dissertation on Logarithms, as usually annexed to his Euclid; a work of great merit, and which is here accompanied with notes by Dr Horsley, that are many of them very useful, and not a few which, though useful, appear ludicrous from the parade with which they are brought forward. At p. 134, Dr Horsley finds the logarithm of the cube root of a decimal fraction by a process a little different from the common, and, as he thinks, somewhat

what easier. He immediately stops to admire the ingenuity of the proceeding ; yet, the device which the learned Bishop esteems so much, is one for which a master might applaud a very young pupil who had discovered it of himself, and, in doing so, he would allow it its full measure of praise ; for, in reality, it amounts to no more than that $\frac{a+b}{3}$ is equal to $\frac{a}{3} + \frac{b}{3}$. Yet the commentator of Newton calls this a discovery which he had made, *Dis propitiis usus*. The rule, *Nec Deus intersit nisi dignus vindice nodus acciderit*, was probably never more violated in poetical fiction than it is here, amid the sobriety of an arithmetical calculation.

The two volumes which we have now been considering, were preceded by another published in 1801, the whole being intended to make one entire course of elementary geometry. That volume, as well as the other two, contains many things useful to a beginner, and particularly in what regards the application of arithmetic to geometry. Yet the three together will form a course of which the parts are not very accurately proportioned, nor very happily arranged ; and he who would use it as his text, must supply many things, retrench several, and transpose not a few. But the work, whatever may be its defects, manifests a degree of knowledge and talent which would deserve praise, if it came forward with less ostentation, and a less marked contempt for others. It is a proof of no common activity of mind, and taste for science, in a station which has sometimes been thought too high, or too sacred for the exercise of these sublunary virtues : And, to the credit of the learned Prelate, it should also be observed, that his love of science has not turned him aside from the duties of his profession ; that his investigations take a very extensive range ; and that, while he finds leisure to comment on Euclid and Eratosthenes, he demonstrates, beyond all contradiction, that France is not a country with wings, and that geographic maps were unknown to the prophet Isaiah.

ART. II. *The Life and Posthumous Writings of William Cowper, Esq. with an Introductory Letter to the Right Honourable Earl Cowper.* By William Hayley, Esq. Vol. III. 4to. pp. 416. Johnson, London. 1804.

THIS is the continuation of a work of which we formerly submitted a very ample account and a very full character to our readers: * on that occasion we took the liberty of observing, that two quarto volumes seemed to be almost as much as the biography of a secluded scholar was entitled to occupy; and with a little judicious compression, we are still of opinion that the life and correspondence of Cowper might be advantageously included in somewhat narrower limits. We are by no means disposed, however, to quarrel with this *third* volume, which is more interesting, if possible, than either of the two former, and will be read, we have no doubt, with general admiration and delight.

Though it bears the title of the life of Cowper, this volume contains no farther particulars of his history, but is entirely made up of a collection of his letters, introduced by a long, rambling sort of dissertation on letter-writing in general, from the pen of his biographer. This prologue, we think, possesses no peculiar merit. The writer has no vigour, and very little vivacity; his mind seems to be cultivated, but not at all fertile; and, while he always keeps at a safe distance from extravagance or absurdity, he does not seem to be uniformly capable of distinguishing affectation from elegance, or dulness from good judgment. This discourse upon letter-writing, in short, contains nothing that might not have been omitted with considerable advantage to the publication; and we are rather inclined to think, that those who are ambitious of being introduced to the presence of Cowper, will do well not to linger very long in the antichamber with Mr Hayley.

Of the letters themselves, we may safely assert, that we have rarely met with any similar collection, of superior interest or beauty. Though the incidents to which they relate be of no public magnitude or moment, and the remarks which they contain be not uniformly profound or original, yet there is something in the sweetness and facility of the diction, and more perhaps in the glimpses they afford of a pure and benevolent mind, that diffuses a charm over the whole collection, and communicates an interest that cannot always be commanded by performances of greater dignity and pretension. This interest was promoted and assisted, no doubt, in a considerable degree, by that curiosity which always seeks to penetrate into the privacy of celebrated men, and which had been almost entirely frustrated in the instance of Cowper, till the appearance of this publication. Though his writings had

long been extremely popular, the author was scarcely known to the Public ; and having lived in a state of entire seclusion from the world, there were no anecdotes of his conversation, his habits or opinions, in circulation among his admirers. The publication of his correspondence has in a great measure supplied this deficiency ; and we now know almost as much of Cowper as we do of those authors who have spent their days in the centre and glare of literary or fashionable notoriety. These letters, however, will continue to be read long after the curiosity is gratified to which perhaps they owed their first celebrity : for the character with which they make us acquainted, will always attract by its rarity, and engage by its elegance. The feminine delicacy and purity of Cowper's manners and disposition, the romantic and unbroken retirement in which his life was passed, and the singular gentleness and modesty of his whole character, disarm him of those terrors that so often shed an atmosphere of repulsion around the persons of celebrated writers, and make us more indulgent to his weaknesses, and more delighted with his excellences, than if he had been the centre of a circle of wits, or the oracle of a literary confederacy. The interest of this picture is still farther heightened by the recollection of that tremendous malady, to the visitations of which he was subject, and by the spectacle of that perpetual conflict which was maintained, through the greater part of his life, between the depression of those constitutional horrors, and the gaiety that resulted from a playful imagination, and a heart animated by the mildest affections.

In the letters now before us, Cowper displays a great deal of all those peculiarities by which his character was adorned or distinguished ; he is frequently the subject of his own observations, and often delineates the finer features of his understanding with all the industry and impartiality of a stranger. But the most interesting traits are those which are unintentionally discovered, and which the reader collects from expressions that were employed for very different purposes. Among the most obvious, perhaps, as well as the most important of these, is that extraordinary combination of shyness and ambition, to which we are probably indebted for the very existence of his poetry. Being disqualified, by the former, from vindicating his proper place in the ordinary scenes either of business or of society, he was excited, by the latter, to attempt the only other avenue to reputation that appeared to be open, and to assert the real dignity of the talents with which he felt that he was gifted. If Cowper had acquired courage enough to read the journals of the House of Lords, or been able to get over the diffidence which fettered his utterance in general society, his genius would probably have evaporated in conversation, or been contented with

the humbler glory of contributing to the *Rolliad* of the *Connoisseur*.

As the present collection relates to no particular set of subjects or occurrences, but exhibits a view of the author's miscellaneous correspondence with the few intimate friends he had retained, it is impossible to give any abstract of its contents, or to observe any order in the extracts that may be made from it. We shall endeavour however to introduce as great a variety as possible.

Though living altogether in retirement, Cowper appears to have retained a very nice perception of the proprieties of conduct and manners, and to have exercised a great deal of acuteness and sagacity upon the few subjects of practical importance which he had occasion to consider. The following sketch is by a fine and masterly hand, and proves how much a bashful recluse may excel a gentleman from the grand tour in delicacy of observation and just notions of politeness.

'Since I wrote last, we had a visit from ——. I did not feel myself vehemently disposed to receive him with that complaisance, from which a stranger generally infers that he is welcome. By his manner, which was rather bold than easy, I judged that there was no occasion for it, and that it was a trifle which, if he did not meet with, neither would he feel the want of: He has the air of a travelled man, but not of a travelled gentleman; is quite delivered from that reserve, which is so common an ingredient in the English character, yet does not open himself gently and gradually, as men of polite behaviour do, but bursts upon you all at once. He talks very loud, and when our poor little robins hear a great noise, they are immediately seized with an ambition to surpass it—the increase of their vociferation occasioned an increase of his, and his in return, acted as a stimulus upon theirs—neither side entertained a thought of giving up the contest, which became continually more interesting to our ears, during the whole visit. The birds however, survived it, and so did we. They perhaps flatter themselves they gained a complete victory, but I believe Mr ——— could have killed them both in another hour.' p. 17-18.

Cowper's antipathy to public schools is well known to all the readers of his poetry. There are many excellent remarks on that subject in these letters. We can only find room for the following.

'A public education is often recommended as the most effectual remedy for that bashful, and awkward restraint, so epidemical among the youth of our country. But I verily believe, that, instead of being a cure, it is often the cause of it. For seven or eight years of his life, the boy has hardly seen or conversed with a man, or a woman, except the maids at his boarding house. A gentleman, or a lady, are consequently such novelties to him, that he is perfectly at a loss to know

what sort of behaviour he should preserve before them. He plays with his buttons, or the strings of his hat, he blows his nose, and hangs down his head, is conscious of his own deficiency to a degree that makes him quite unhappy, and trembles lest any one should speak to him, because that would quite overwhelm him. Is not all this miserable shyness the effect of his education? To me it appears to be so. If he saw good company every day, he would never be terrified at the sight of it, and a room full of ladies and gentlemen, would alarm him no more than the chairs they sit on. Such is the effect of custom.' p. 60.

There is much acuteness in the following examination of Dr Paley's argument in favour of the English hierarchy.

'He says first, that the appointment of various orders in the Church, is attended with this good consequence, that each class of people is supplied with a clergy of their own level and description, with whom they may live and associate on terms of equality. But in order to effect this good purpose, there ought to be at least three parsons in every parish, one for the gentry, one for the traders and mechanics, and one for the lowest of the vulgar. Neither is it easy to find many parishes, where the laity at large have any society with their minister at all. This therefore is fanciful, and a mere invention: in the next place he says it gives a dignity to the ministry itself; and the clergy share in the respect paid to their superiors. Much good may such participation do them! They themselves know how little it amounts to. The dignity a parson derives from the lawn sleeves, and square cap of his diocesan, will never endanger his humility. Again—'Rich and splendid situations in the Church, have been justly regarded as prizes, held out to invite persons of good hopes, and ingenuous attainments.' Agreed. But the prize held out in the scripture, is of a very different kind; and our ecclesiastical baits are too often snapped by the worthless, and persons of no attainments at all. They are indeed incentives to avarice and ambition, but not to those acquirements, by which only the ministerial function can be adorned, zeal for the salvation of men, humility, and self-denial. Mr Paley and I therefore cannot agree.' p. 172-173.

One of the most remarkable things in this volume, is the great profusion of witty and humorous passages which it contains, though they are usually so short, and stand so much connected with more indifferent matter, that it is not easy to give any tolerable notion of them by an extract. His style of narrative is particularly gay and pleasing, though the incidents are generally too trifling to bear a separation from the whole tissue of the correspondence. We venture on the following account of an election visit.

'As when the sea is uncommonly agitated, the water finds its way into creeks and holes of rocks, which in its calmer state it never reaches, in like manner the effect of these turbulent times is felt even at Orchard-side, where in general we live as undisturbed by the political element,

ment, as shrimps or cockles that have been accidentally deposited in some hollow beyond the water mark, by the usual dashing of the waves. We were sitting yesterday after dinner, the two ladies and myself, very composedly, and without the least apprehension of any such intrusion, in our snug parlour, one lady knitting, the other netting, and the gentleman winding worsted, when to our unspeakable surprise, a mob appeared before the window, a smart rap was heard at the door, the boys halloo'd, and the maid announced Mr G——. Puss* was unfortunately let out of her box, so that the candidate, with all his good friends at his heels, was refused admittance at the grand entry, and referred to the back door, as the only possible way of approach.

‘Candidates are creatures not very susceptible of affronts, and would rather, I suppose, climb in at a window, than be absolutely excluded. In a minute, the yard, the kitchen, and the parlour, were filled. Mr G——, advancing toward me, shook me by the hand with a degree of cordiality that was extremely seducing. As soon as he, and as many as could find chairs were seated, he began to open the intent of his visit. I told him I had no vote, for which he readily gave me credit. I assured him I had no influence, which he was not equally inclined to believe, and the less no doubt because Mr A——, addressing himself to me at that moment, informed me that I had a great deal. Supposing that I could not be possessed of such a treasure without knowing it, I ventured to confirm my first assertion, by saying, that if I had any, I was utterly at a loss to imagine where it could be, or wherein it consisted. Thus ended the conference. Mr G—— squeezed me by the hand again, kissed the ladies, and withdrew. He kissed likewise the maid in the kitchen, and seemed upon the whole a most loving, kissing, kind hearted gentleman. He is very young, genteel, and handsome. He has a pair of very good eyes in his head, which not being sufficient, as it should seem, for the many nice and difficult purposes of a senator, he had a third also, which he wore suspended by a ribbon from his button-hole. The boys halloo'd, the dogs barked, Puss scampered, the hero, with his long train of obsequious followers, withdrew. We made ourselves very merry with the adventure, and in a short time settled into our former tranquillity, never probably to be thus interrupted more. I thought myself however happy in being able to affirm truly, that I had not that influence for which he sued, and for which, had I been possessed of it, with my present views of the dispute between the Crown and the Commons, I must have refused him, for he is on the side of the former. It is comfortable to be of no consequence in a world, where one cannot exercise any without disobliging somebody.’ p. 242-4.

Melancholy and dejected men often amuse themselves with pursuits that seem to indicate the greatest levity. Swift wrote all sorts of doggrel and absurdity while tormented with spleen,

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giddiness,

* His tame Hare.

The following shorter sketches, though not marked with so much enthusiasm, are conceived with the same vigour and distinctness.

'When we look back upon our forefathers, we seem to look back upon the people of another nation, almost upon creatures of another species. Their vast rambling mansions, spacious halls, and painted case-ments, the Gothic porch smothered with honeysuckles, their little gardens and high walls, their box-edgings, balls of holly, and yew-tree statues, are become so entirely unfashionable now, that we can hardly believe it possible that a people, who resembled us so little in their taste, should resemble us in any thing else. But in every thing else, I suppose, they were our counterparts exactly, and time, that has sewed up the slashed sleeve, and reduced the large trunk-hose to a neat pair of silk stockings, has left human nature just where it found it. The inside of the man, at least, has undergone no change. His passions, appetites, and aims, are just what they ever were. They wear perhaps a handsomer disguise than they did in days of yore; for philosophy and literature will have their effect upon the exterior, but in every other respect a modern is only an ancient in a different dress.' p. 48.

'I am much obliged to you for the voyages, which I received, and began to read last night. My imagination is so captivated upon these occasions, that I seem to partake with the navigators in all the dangers they encountered. I lose my anchor; my main-sail is rent into shreds; I kill a shark, and by signs converse with a Patagonian, and all this without moving from the fire-side. The principal fruits of these circuits that have been made around the globe, seem likely to be the amusement of those that staid at home. Discoveries have been made, but such discoveries as will hardly satisfy the expence of such undertakings. We brought away an Indian, and having debauched him, we sent him home again to communicate the infection to his country—fine sport to be sure, but such as will not defray the cost. Nations that live upon bread-fruit, and have no mines to make them worthy of our acquaintance, will be but little visited for the future. So much the better for them; their poverty is indeed their mercy.' p. 201-202.

Cowper's religious impressions occupied too great a portion of his thoughts, and exercised too great an influence on his character, not to make a distinguished figure in his correspondence. They form the subject of many eloquent and glowing passages; and have sometimes suggested sentiments and expressions that cannot be perused without compassion and regret. The following passage is liberal and important.

'No man was ever scolded out of his sins. The heart, corrupt as it is, and because it is so, grows angry if it be not treated with some management, and good manners, and scolds again. A surly mastiff will hear perhaps to be stroked, though he will growl even under that operation,

tion, but if you touch him roughly, he will bite. There is no grace that the spirit of self can counterfeit with more success than a religious zeal. A man thinks he is fighting for Christ, and he is fighting for his own notions. He thinks that he is skilfully searching the hearts of others, when he is only gratifying the malignity of his own; and charitably supposes his hearers destitute of all grace, that he may shine the more in his own eyes by comparison.' p. 179-180.

The following is in a fine style of eloquence :

' We have exchanged a zeal that was no better than madness, for an indifference equally pitiable and absurd. The holy sepulchre has lost its importance in the eyes of nations, called Christian; not because the light of true wisdom has delivered them from a superstitious attachment to the spot, but because he that was buried in it is no longer regarded by them as the Saviour of the world. The exercise of reason, enlightened by philosophy, has cured them indeed of the misery of an abused understanding, but together with the delusion they have lost the substance, and, for the sake of the lies that were grafted upon it, have quarrelled with the truth itself. Here, then, we see the *ne plus ultra* of human wisdom, at least, in affairs of religion. It enlightens the mind with respect to non-essentials; but with respect to that in which the essence of Christianity consists, leaves it perfectly in the dark. It can discover many errors, that in different ages have disgraced the faith; but it is only to make way for the admission of one more fatal than them all, which represents that faith itself as a delusion. Why those evils have been permitted, shall be known hereafter. One thing in the mean time is certain; that the folly and frenzy of the professed disciples of the gospel have been more dangerous to its interests than all the avowed hostilities of its adversaries.' p. 200-201.

There are many passages that breathe the very spirit of Christian gentleness and sober judgment. But when he talks of his friend Mr Newton's *prophetic* intimations (p. 35), and maintains that a great proportion of the ladies and gentlemen who amuse themselves with dancing at Brighthelmstone, must necessarily be damned (p. 100), we cannot feel the same respect for his understanding, and are repelled by the austerity of his faith. The most remarkable passage of this kind, however, is that in which he supposes the death of the celebrated Captain Cook to have been a *judgment* on him for having allowed himself to be *worshipped* at Owhyhee. Mr Hayley assures us, in a note, that Cowper proceeded altogether on a misapprehension of the fact. The passage, however, is curious, and shews with what eagerness his powerful mind followed that train of superstition into which his devotion was sometimes so unfortunately betrayed.

' The reading of those volumes afforded me much amusement, and I hope some instruction. No observation, however, forced itself upon me with more violence than one, that I could not help making, on the death of Captain Cook. God is a jealous God, and at Owhyhee the poor

poor man was content to be worshipped. From that moment, the remarkable interposition of Providence in his favour, was converted into an opposition that thwarted all his purposes. He left the scene of his deification, but was driven back to it by a most violent storm, in which he suffered more than in any that had preceded it. When he departed, he left his worshippers still infatuated with an idea of his godship, consequently well disposed to serve him. At his return, he found them sullen, distrustful, and mysterious. A trifling theft was committed, which, by a blunder of his own in pursuing the thief after the property had been restored, was magnified to an affair of the last importance. One of their favourite chiefs was killed, too, by a blunder. Nothing, in short, but blunder and mistake attended him, 'till he fell breathless into the water, and then all was smooth again. The world indeed will not take notice, or see that the dispensation bore evident marks of divine displeasure; but a mind, I think, in any degree spiritual, cannot overlook them.' p. 293 294.

From these extracts, our readers will now be able to form a pretty accurate notion of the contents and composition of this volume. Its chief merit consists in the great ease and familiarity with which every thing is expressed, and in the simplicity and sincerity in which every thing appears to be conceived. Its chief fault, perhaps, is the too frequent recurrence of these apologies for dull letters, and complaints of the want of subjects, that seem occasionally to bring it down to the level of an ordinary correspondence, and to represent Cowper as one of those who make every letter its own subject, and correspond with their friends by talking about their correspondence.

Besides the subjects of which we have exhibited some specimens, it contains a good deal of occasional criticism, of which we not think very highly. • It is not easy, indeed, to say to what degree the judgments of those who live in the world are biassed by the opinions that prevail in it; but, in matters of this kind, the general prevalence of an opinion is almost the only test we can have of its truth; and the judgment of a secluded man is almost as justly convicted of error, when it runs counter to that opinion, as it is extolled for sagacity, when it happens to coincide with it. The critical remarks of Cowper furnish us with instances of both sorts, but perhaps with most of the former. His admiration of Mrs Macaulay's History, and the rap-
ture with which he speaks of the Henry and Emma of Prior, and the compositions of Churchill, will not, we should imagine, attract the sympathy of many readers, or suspend the sentence
• which time appears to be passing on these performances. As there is scarcely any thing of love in the poetry of Cowper, it is not very wonderful that there should be nothing of it in his correspondence. There is something very tender and amiable in his
affection

affection for his cousin Lady Hesketh; but we do not remember any passage where he approaches to the language of gallantry, or appears to have indulged in the sentiments that might have led to its employment. It is also somewhat remarkable, that during the whole course of his retirement, though a good deal embarrassed in his circumstances, and frequently very much distressed for want of employment, he never seems to have had an idea of betaking himself to any profession. The solution of this difficulty is probably to be found in the infirmity of his mental health; but there were ten or twelve years of his life, when he seems to have been fit for any exertion that did not require a public appearance, and to have suffered very much from the want of all occupation.

This volume closes with a fragment of a poem by Cowper, which Mr Hayley was fortunate enough to discover by accident among some loose papers which had been found in the poet's study. It consists of something less than two hundred lines, and is addressed to a very ancient and decayed oak in the vicinity of Weston. We do not think quite so highly of this production as the editor appears to do; at the same time that we confess it to be impressed with all the marks of Cowper's most vigorous hand: we do not know any of his compositions, indeed, that affords a more striking exemplification of most of the excellences and defects of his peculiar style, or might be more fairly quoted as a specimen of his *manner*. It is full of the conceptions of a vigorous and poetical fancy, expressed in nervous and familiar language; but it is rendered harsh by unnecessary inversions, and debased in several places by the use of antiquated and vulgar phrases. The following are about the best lines which it contains:

'Thou wast a bauble once; a cup and ball,
Which babes might play with; and the thievish jay
Seeking her food, with ease might have purloin'd
The auburn nut that held thee, swallowing down
Thy yet close-folded latitude of boughs,
And all thine embryo vastness, at a gulp.
But fate thy growth decreed: autumnal rains,
Beneath thy parent-tree, mellow'd the soil
Design'd thy cradle, and a skipping deer,
With pointed hoof dibbling the glebe, prepar'd
The soft receptacle, in which secure
Thy rudiments should sleep the winter through.'

'Time made thee what thou wast—King of the woods!
And time hath made thee what thou art—a cave
For owls to roost in! Once thy spreading boughs
O'erhung the champain, and the numerous flock

That

That graz'd it, stood beneath that ample cope
 Uncrouded, yet safe-sheltered from the storm.
 No flock frequents thee now ; thou hast outliv'd
 Thy popularity, and art become
 (Unless verse rescue thee a while) a thing
 Forgotten, as the foliage of thy youth !'

' One man alone, the father of us all,
 Drew not his life from woman ; never gaz'd,
 With mute unconsciousness of what he saw,
 On all around him ; learn'd not by degrees,
 Nor ow'd articulation to his ear ;
 But moulded by his Maker into man
 At once, upstood intelligent, survey'd
 All creatures, with precision understood
 Their purport, uses, properties, assign'd
 To each his name significant, and fill'd
 With love and wisdom, render'd back to Heaven
 In praise harmonious, the first air he drew.
 He was excus'd the penalties of dull
 Minority ; no tutor charg'd his hand
 With the thought-tracing quill, or task'd his mind
 With problems ; history, not wanted yet,
 Lean'd on her elbow, watching time, whose course
 Eventful, should supply her with a theme ;—' p. 415-416.

On the whole, though we complain a little of the size and the price of the volumes now before us, we take our leave of them with reluctance, and lay down our pen with no little regret, to think that we shall review no more of this author's productions.

Art. III. *Sur la Philosophie Mineralogique, et sur l'Espece Mineralogique.* Par le Citoyen D. Dolomieu. Paris. An. IX.

THIS is the last bequest made to science, by the powerful genius of Dolomieu. Educated to the profession of arms, he was a late, but a zealous disciple of science ; and, though his best years were wasted in the endless adjustment of monastic quarrels, he has done more for geology than any man who has preceded or followed him, unless an exception be made in favour of the illustrious De Saussure. Valuable as the writings of Dolomieu are, perhaps they do not convey an adequate idea of the capacity of his mind, or the vastness of his information. A life spent in continual activity left him few moments to arrange his observations, or to describe the regions he visited. Yet the detached essays he has published, are the most original and ingenious speculations to which the study of the earth has yet given rise ; and his descriptions of the Lipari and Pontian Islands need no higher praise,

praise, than they derive from a comparison with the performances of other mineralogical travellers. His ardent pursuit of science was aided by the remarkable acuteness of his talent for observation; and the knowledge which he had acquired, was speedily diffused by the happy perspicuity of his descriptions. But the boldness and improbability of his theories, the light grounds on which they were assumed, and the ease with which they were relinquished, have been urged as proofs that his mind was frivolous, and his judgment defective.

We have seen too many remarkable instances of the triumphs of imagination, to allow the aspect or description of those theoretic phantoms, which the wisest of us are sometimes amused by embodying, to have much weight in the appretiation of a man's intellectual powers. We conceive judgment to consist rather in a nice adjustment of the several faculties of the mind, than in one independant quality. In this view, the judgment of Dolomieu cannot be disputed; for he was most judicious in observation, and most judicious in description. So accurate was his judgment in matters of science, and so profound his contempt for the little jealousies of theorists, that he repeatedly abandoned his own opinions, and adopted those suggested by others, whose ingenuity he never failed to reward by suitable praise, and whose hints often received from him extension and consistence. Never has the veracity of Dolomieu been questioned, or the slightest suspicion arisen, that he distorted facts to favour his hypothetical assumptions: His writings are referred to as *evidence*, by the most opposite theorists, and with a confidence equally implicit. In most instances, his opinions are still the standard of authority among the best informed geologists; and he has only been betrayed into idle speculation on those subjects, which have not derived additional illustration from the sapient cogitations of his critics.*

Great as the individual exertions and success of Dolomieu have been, they were surpassed by the indirect services which he rendered to science, by his zealous patronage of men of talents, by the frankness with which he communicated his ample stores of information to the young men who accompanied him in his travels, and by the unbounded liberality with which he distributed the rare and valuable substances he collected. Yet nearly two of the last years of this man's life were spent in prisons, into which he was thrown by violent abuse of arbitrary power; and nearly
half

* Sir James Hall is an honourable exception: for his experiment on the transition from glass to stone have entirely obviated the difficulty which forced Dolomieu into one of his wildest conjectures.

half of that time he was confined in a dungeon, in whose mephitic atmosphere suffocation would have ensued from a recumbent posture, and where the violent efforts, sometimes required to maintain respiration, made him vomit blood. In the solitude and horror of this dungeon, the plan of the work we are about to examine was conceived, and its arrangement digested. Portions of it were written between the lines of some books he accidentally retained, with splinters of wood instead of a pen, and with ink made by mixing the soot of his lamp with water. For his deliverance from this sepulchral den, Dolomieu was chiefly indebted to the generous interposition of the Royal Society of London, and of their worthy president; and to the powerful influence of an heroic admiral, who endeavoured, by this act, to efface the stains which his glory had received from the imputation of a violated capitulation.

The health of Dolomieu, however, was never completely restored; and he died in less than a year after his release, and soon after the termination of a journey in Switzerland, during part of which he was accompanied by a Dane, called Neergaard.

This personage has attempted to perform for Dolomieu the posthumous attentions paid by Boswell to Dr Johnson, by Bisset to Burke, and, in a more recent instance, by Miss Seward to Dr Darwin. Like these illustrious biographers, he undoubtedly expects to enjoy celebrity, as high priest in the Temple of Fame which he has erected; and, in this happy persuasion, he has given to the world, and more especially to the trunk-makers and pastry-cooks of Paris, a performance which boasts three distinct titles: For, in the first page, it is called *Journal d'un Danois*; in the title page, *Journal du dernier Voyage du Citoyen Dolomieu*; and at the top of the first page of the text, *Journal de mon Voyage avec le Citoyen Dolomieu*. As the first and the last of these descriptions are in some degree applicable to the performance, we shall not stop to inquire what right the second had to usurp the title-page. Indeed, as the work is altogether foreign to the treatise we are about to consider, we perhaps ought to dismiss it entirely; but there is something so seducing in the sound of *Dernier Voyage du Citoyen Dolomieu* (the title to which it has no real claim), that our readers may not think a very few observations entirely misplaced, or devoid of interest.

Did we not know, that the Danes, in general, are more prudent than witty, we should think the author of this '*Journal*' had been expatriated by the ridicule of his countrymen; but as the intelligent part of them would certainly have endeavoured to keep concealed so deplorable a specimen of the breed, we have rejected this supposition in favour of another, which we have good reason

reason to believe correct. Among those who bear sway in Denmark, some are to be found, who, from congeniality of sentiment and talent, have graciously considered M. Neergaard as a proper person to be fitted out as a scientific privateer, to accumulate and carry home the arts and sciences of Europe. Fortunately for the success and economy of this enterprise, M. Neergaard concentrates the most opposite attainments: he is equally profound in painting, music, chemistry, mineralogy, *belles lettres*, antiquities, and agriculture. In every page of this journal, he passes, with inimitable nimbleness and facility, from one of these sciences to another, and thereby affords an attentive reader frequent opportunities of gleaning much diversified information.

He tells us, that Dolomieu had no theory at hand to explain the *Roche polie*, and that he wondered how Bonaparte and his cannon passed St Gothard; he finds, in the churches of Sion, the Madonna Santissima painted with the face of a Cretin; and we are informed, that Dolomieu gave alms to a cripple at the baths of Leuk, where the author drank excellent Muscat wine. Moreover, that the travellers were received at Leuk, in the house of a man who was 'not an innkeeper, but one of the first nobles of the country; that he charged them the value of what they eat; and that Dolomieu was much delighted with this *modern hospitality*.' After describing a cascade, he sagely remarks, that 'if travelling is expensive to him on one hand, it is economical on the other; for he will never make an artificial cascade, after seeing those of Norway and Switzerland.' We have translated this remark at full length, as it is infinitely the best in the book; and if M. Neergaard's resolution was generally adopted, much money might be saved, and the display of much bad taste prevented. As Saussure has already recorded some instances of the inhospitality of Alpine curés, our readers probably have been more surprised at M. Neergaard's late effort of sagacity, than they will be, at being informed that the pastor of St Roch refused bread to the travellers, though he afterwards gave some to their mules. Every one, however, may not be aware, that it is 'the mode in Switzerland, for persons to have a piece of chalk always in their hands to make calculations;' and, accustomed as we were to M. Neergaard's vivacity of transition, we were somewhat astonished at being told, immediately after a magnificent declamation of Dolomieu's on the best way of forming specimens, 'that every body there eats brocoli, a kind of cauliflower very common in Italy.'

During the time the travellers remained in the mountains, Dolomieu is occasionally seen, though kept as much as possible in the back-ground. The Dane Neergaard is every where the principal

principal figure; and a Benedictine of Discentir, whose brethren appear to have been concerned in a massacre of French prisoners, 'complimented him on the good reception Copenhagen had given the English.' After their arrival at Berne, Dolomieu almost entirely disappears; and the whole attention of M. Neergaard is occupied in panegyriizing some obscure artists, most of whom possess the limited and equivocal reputation he labours to attain for himself. The remainder of the volume contains sundry passages equally precious with those we have quoted; but we do not propose to increase our selection; and hasten to the conclusion, where we find, to our inexpressible satisfaction, that the travellers having separated some days before the commencement of Dolomieu's fatal illness, the tranquillity of his last hours was not disturbed by the impertinence of his *soi-disant* friend.*

Let us turn to a work of a very different cast, '*Sur la Philosophie Mineralogique*.'

The similarity of the title will not, we hope, induce any one to suppose that this tract resembles, in any respect, a book called the Philosophy of Mineralogy, which was published in this country some years ago. That was the crude performance of a man, who had just learnt enough of the German system, to observe some of its glaring defects, but who had not sufficient genius to suggest an adequate remedy; who, conceiving his imperfect and limited geological knowledge to comprise all the arcana of the science, imagined that an ill arranged compilation of the common-place notions on geology, and on the description and classification of minerals, could deserve the high-sounding title of the 'Philosophy of Mineralogy.'

The essay we are about to examine '*Sur la Philosophie Mineralogique*,'

* it is not our intention to be either the biographers or eulogists of Dolomieu; but we think it an honourable department of our duty to rescue illustrious characters from misrepresentation. Perhaps some of our readers may not have been informed, that, at an early period of his life, Dolomieu saved most of the sick in an hospital from being burnt to death, by exposing his own life in cutting off the communication of the flames—that at the most atrocious period of the Revolution he had the intrepidity to publish an eloquent tribute to the virtues of the murdered La Rochefoucault, and a terrible denunciation against his authorised assassins—that when, on his release from prison, the First Consul desired him to ask what he pleased, he was contented with demanding the erasure of his eldest brother's name from the list of emigrants—and that when he was elected a professor at the *Jardin des Plantes*, he resigned his commission as engineer of the mines, because, he said, many men of merit needed the salary more than he did.

ogique,' is the work of a man who was acquainted with all existing systems, and sensible of their defects; who had genius to devise a remedy, and judgment to point out its application. This work has nothing to do with present systems, but to expose their errors; and proceeds no farther in framing a new one, than to define, clearly, the line that should be pursued.

Mineralogy, properly so called, may be practical or philosophical. Its practical employment consists in the research and examination of all mineral substances, in recognizing and distinguishing them, in naming and arranging them in determinate species and convenient genera, in describing them with exactness, and assembling them to form collections. To philosophical mineralogy belong—the examination of methods practically employed—the investigation of all the properties of which minerals are susceptible, that from their comparison distinctive and specific characters may be deduced—the right of determining the meaning of the words employed, and of affixing precise and invariable terms to every modification of substances—the formation of methods for the arrangement and description of minerals—the right of criticizing systems proposed or adopted—the history of what has been done for the advancement of the science, and of the causes which have advanced or retarded it—and the indication of every thing that can facilitate the progress of the mineralogist, that can assist his labours, or simplify his researches.

Important as these considerations are, they have been treated with comparative neglect. The attention of mineralogists has been almost entirely occupied by the more showy toil of accumulating specimens into classes and genera, dividing them into species, and arranging them in cabinets. They forgot to examine, by strict philosophic inquiry, the foundation of their divisions, the justice of their criteria, or the propriety of their arrangement. Though no mineralogist, since the time of Bergman, has written expressly on the philosophical part of the subject, many have indirectly contributed to its advancement. Werner did much, by limiting the meaning of the terms employed, and by proving the vast utility of external characters in the discrimination of minerals. Yet Werner left the subject extremely imperfect, by his voluntary rejection of internal characters, and by his absolute neglect of all fixed rules in determining the species. This negligence, indeed, has been common to every system of mineralogy that has appeared,* and the most extraordinary and prejudicial confusion has

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resulted

* When Dolomieu composed this essay, the '*Traité de Mineralogie*' by Haüy was not published. In most respects it is composed on such a plan as he indicates.

resulted from it. A number of minerals, from some imagined similitude, have been huddled into a genus, and then, from fancied differences, have been split into species. As the accumulation into genera generally preceded the division into species, that operation became a fertile source of subsequent mistakes. Sometimes the grossest incongruities were united in the varieties of the same species; and sometimes the faintest shade of dissimilarity constituted a separate species.

With an amiable attention to the feelings of living authors, Dolomieu has selected the instances by which he illustrates these absurdities, from Wallerius and Born, though he might have strengthened his argument by approaching nearer to his own times. The arrangements he refers to are now generally allowed to be defective; but, unfortunately, the attempts to reform them have, in too many instances, been made by hands equally rash and indecisive with those that committed the original mistakes. It is only by examining, in detail, the sources of error, that we can intercept their operation on future systems; and such an inquiry is certainly one of the most important in which we can engage.

Nothing has contributed more copiously to the errors of mineralogy, than the perverse and prevailing system of establishing *genera*, previous to the accurate division into *species*. Other errors have proceeded from considering compound masses as species. Additional mistakes have been created, by confounding the strict mineralogical species with the conventional species of artists; and, from the co-operation of these causes, such confusion has been produced, that many naturalists have denied the possibility of limiting the mineralogical species, or, in other words, have denied that any real distinction of species existed.

By removing from our view all the deceptive circumstances with which the consideration of this subject has been embarrassed, we shall find that the mineralogical species actually exists; that it is defined by a combination of the most invariable laws; that every species is represented by a molecule possessing properties whose aggregate is peculiar to itself; that every species of mineral is distinguished by a peculiar molecule, and that each kind of molecule is always found in possession of its characteristic properties; that a combination of similar molecules can only constitute one species of mineral, and that the aggregate so formed will retain the characters of the molecules which form it.

We are informed by chemistry, that fragments from different parts of a homogeneous mineral are similarly composed, and that minerals of the same physical characters yield similar results; and therefore we are assured that the composition of the
molecule

molecule is always the same in the same species. We find that, in breaking such minerals as are susceptible of mechanical division, we always extract from the same substance solids of precisely similar forms. We also find that all the crystalline modifications of such substance, are deducible from the accumulation of solids similar to those which we have mechanically extracted; and thence we acquire this most important information, that the molecule has an invariable form, determined with geometrical precision. We find that salts dissolved and crystallized a thousand times, never vary in their crystalline forms, and therefore we know that the molecule possesses an inherent crystalline polarity, which gives it an indefinite power of reproducing solids similar in form and composition. We also find the magnetic phenomena to be attached to the smallest fragments of such bodies as possess it in the mass; and therefore we know magnetism to be inherent in the molecule.

The molecules of those bodies which, by resisting our efforts to disintegrate them, have hitherto been considered as simple, can only be deprived of their properties by combination with other elementary bodies. This combination generates new molecules, which cannot be taken away without effecting the decomposition and destruction of the molecule. This may be accomplished, either by forming a new combination with a fresh ingredient, or by removing some of the constituent elementary particles. It may be observed, that this intimate union of the ultimate particles of substances rarely takes place among many ingredients, and that, in many molecules, only two ingredients are essential, and in few more than three.

Each molecule, therefore, however minute, has a certain composition, is invested with a determinate form, and possessed of unalterable physical characters. It therefore is an individual, and the representative of a species. The accumulation of such molecules, in the most favourable circumstances, would generate regular crystals possessing the form of the molecule, or derivable from it, and invested with all the properties which the molecule possesses. The accumulation of different molecules would form another species; and there can be no binary or other combination of molecules to form intermediate species.

But though intermediate species cannot exist, it is but rarely that minerals are found in a state of aggregation fit for displaying all the properties of the molecule, or uncontaminated by parasitical substances. If the molecules are suspended in a fluid, if they are in a pulverulent state, or forming an amorphous mass, the development of many of their properties is necessarily prevented. The most important of them all, the regularity of form, is entirely concealed; and if other characters are not

found sufficient to discriminate the species, recourse must be had to the analytic investigation of its components. Thus, if the fluid be homogeneous, the species may be detected; if the powder be unmixed, its composition may be found out; the amorphous mass may possess such internal arrangement, that the direction of the natural joints may be observed, and consequently the form of the molecule may be determined; and, even when arrangement is wanting, the task of discrimination may be performed by numerous distinct physical qualities.

It is not, however, the variety of aggregation that proves the most abundant source of error, but the adventitious additions which contaminate minerals. Some of these seem to adhere to the molecule itself, to be even insinuated as passive ingredients into its composition, to be enveloped during the aggregation of molecules into crystals, and, still more abundantly, during their consolidation into irregular masses. These superfluities in no respect alter the form or properties of the molecule, and their quantity is rarely sufficient to affect, in any considerable degree, the apparent results of analysis. As chemistry cannot separate them, it is only by observing their want of influence that their superfluity can be ascertained. Though these superfluities may not affect the essential properties of the molecule, there may be many causes in which they may vary some of its physical characters. Thus, all varieties of colour are produced by superfluous matter; and when it is added in greater abundance, it affects the transparency, and perhaps the hardness of the substance, and may vary the action of chemical tests. The superfluous matter may be increased to such an amount, that it may exceed in quantity the molecules of the substance, which may nevertheless retain its characteristic qualities. Thus the (improperly so called) crystallized sand-stone of Fontainebleau, contains more siliceous matter than carbonated lime; and yet the crystals, so charged, assume one of the regular forms of carbonated lime, effervesce with acids, and are decomposed by heat.

The changes *thus* induced in the physical constitution of the species, neither form new species, nor are they properly varieties of the original one: they are mere imperfections. Yet even these imperfections may be of important use in discriminating species, though particular care must be taken not to fall into the very common error of founding the distinctions of species upon them. It should never be forgotten that the sapphire, the ruby, and the topaz of the East, in defiance of the superior judgment of the natives of the countries where they are found, have been separated into three species by all the mineralogists in Europe, merely because the one was blue, the other red, and the third

third yellow; and it required some years of controversy, with all the sagacity of Mr Greville, the crystallographical skill of Count Bournon, and the analytical ability of Mr Chenevix, to produce a conviction of their identity. Yet, we repeat it, there is *no difference* between these bodies except in colour! The same talents that have determined the propriety of their union, have also united with them the corundum, or adamantine spar; a substance which presents much more striking diversity to the eye, though in every essential character it coincides, and in composition is exactly the same. Let this instance suffice to show the wretched errors into which those must fall who class minerals by the lustre or the hue, and who, consequently, are almost invariably guided by their imperfections instead of their essential characters.

In the formation of species, nothing should be considered but the unalienable characters of the molecule; but in the distribution of specimens to the species to which they appertain, recourse must be had, not only to such of the characters of the molecule as are never concealed, but also to the parasitical characters caused by the superfluous matter which attaches itself to the molecules. Though the constant occurrence of similar imperfections should in no respect whatever influence the formation of species, they may afford most useful distinctive criteria; and their union with other characters, in themselves unimportant, may form an evidence sufficiently decisive of the nature of particular specimens. To strengthen this evidence, many extrinsic circumstances may be taken into consideration. Independent of the characters derivable from the essential properties of the molecule, the general assumption of a particular colour may afford a strong presumption. Other species may be distinguished by their affecting peculiar dispositions of the molecules, as by their crystals being generally of one form, or generally defective, or assuming particular indeterminate forms, or being always amorphous. Other indications, equally important, may be derived from association; for it is ascertained, that certain minerals are almost invariably found together, and that others are always disunited. In secondary rocks we need not look for primitive minerals. We know that lavas generally contain certain bodies; and therefore the knowledge that the basis is a lava, affords a presumption that the imbedded substances only belong to a few species which are easily distinguishable from one another.

It is not enough to be informed of the characters which serve to unite individual specimens to a given species: we must also possess a knowledge of the points of resemblance between differ-

ent species, that a contrast may be opposed to each similitude. The chemist finds a sufficient contrast in the analysis. The mineralogist seeks it in the physical characters. The union of distinctive characters forms the specific character of a species which may consist of one property or of several; and there are few substances which do not require the union of several properties to form it. We can affirm of the diamond, that it is harder than any known body; and this may serve as its specific character: but there are few substances which possess any one property so universally peculiar. For it must be remembered, that the specific character is to distinguish the species from every other substance, though each of the distinctive characters of which it is composed may only serve to separate it from a particular species.

As the species is capable of being defined with the most rigorous precision, it ought to form the basis of every methodical arrangement. No substance can be admissible into any strict mineralogical system, which is not referable to some species; and every species may be considered as the centre, round which all its varieties are to be collected. Genera ought to be formed by the union of species, and from similarities derivable from their essential characters, and not from their imperfections. This is comparatively an unimportant task; for it was truly said by Buffon, that 'science makes the species, and ignorance the genera;' and provided the analogy, on which the congregation into genera proceeds, be strictly observed, it is of little importance which is assumed of the numerous relations that present themselves.

But it is obvious, that there are a formidable number of compound bodies which this arrangement would exclude from methodical mineralogy, and which are of vastly too great importance to be treated with neglect. Where their components are distinguishable by the several tests we have it in our power to apply, they may be classed as compounds, and described by the enumeration of their components; but in the more numerous instances, where the particles that form them are too minute to be recognised, there seems to be no other resource, than to refer them to geology, to whose province they belong, to arrange them according to their relative position and combinations, and to describe them according to such physical characters as they possess. As all these substances are liable to perpetual mutability of composition, these characters cannot be permanent or unchanging, though they may be in some degree regulated by the geological relations which afford the only means of determining the nature of heterogeneous masses, unless recourse be
had

had to the endless toil of analyses, whose results must vary in every specimen. These masses cannot constitute species, though they form rocks of a particular *sort*; and that term seems to be the most applicable to them, as well as to these conventional species depending on particular and unphilosophical considerations which artists have lavishly invented.

It seems obvious, that the adoption of the strict rules of investigation here recommended, would operate most beneficially in aiding the progress of mineralogy, and in facilitating the acquisition of what is already known. The attention, instead of being unprofitably directed to frivolous *minutiae*, would be centred on a few grand essentials, the acquisition of which would not merely serve to form mineralogical distinctions, but to convey an important knowledge of the nature of the substance, by enforcing attention to its physical properties. Mineralogy would be simplified by the rejection of unnecessary species, and by the subdivision of such as were incongruously comprehensive. The subjection of all unknown substances to rigorous examination, would either ascertain their union with a species already known, or legitimate their claims to forming a separate species. Geology would become an essential branch of knowledge; so that no mere mineralogist of the cabinet could exist. The chaos of improper appellations would in time be done away; and mineralogy, thus simplified and extended, would become more accessible, comprehensive, and important.

In this short abstract, we have not exactly followed the arrangement of the original work, nor have we entered into the collateral discussions which appeared not intimately connected with the subject, or to be of little consequence in its consideration. We have not followed Dolomieu in his attempt to fix the meaning of certain words he employs, because they only apply to those *minutiae*, into the discussion of which our limits do not permit us to enter; and we here confined our endeavours to laying before our readers the scope and the strength of his argument. Though we might complain that, in this work, Dolomieu has sometimes been tedious, and sometimes frivolous, and that he has too often resorted to the inaccuracy of metaphorical illustration, we consider his object as completely and decisively established; and we venture to hope, that no further fabricator of a system of mineralogy will forget, that each species is capable of the most rigorous definition; that genera are to be formed from species, and not species from genera; that the imperfections of individual specimens ought never to constitute species; and that such masses as, by the mutability of their composition, or variability of their characters, cannot be constantly referred to any

definite species, are not to be intruded into systematic mineralogy at all, but are to be transferred to their geological relations. After so masterly an exposition of the capabilities of this science, no indulgence, we think, should be shown to those whose weakness or perversion of intellect shall hereafter allow them to neglect or abandon the straight line which the illustrious hand of Dolomieu has traced, and thus retard, by retrograde, or erring movements, the march of that science they pretend to advance.

ART. IV. *The Georgics of Virgil.* Translated into English verse by William Sotheby, Esq.

THE author of this translation has deservedly the character of a refined and elegant scholar. He is known to the public by numerous productions, but principally by the translation of Wieland's *Oberon*; a charming poem, in the perusal of which we forget the sober and sceptical criticism of the age in which we live, and willingly indulge to a modern writer that licence of wild and extravagant fiction which has been usually confined to the specious miracles of antiquity.* He has now ventured on a bolder task, in clothing with an English dress the most perfect, though not the loftiest monument of Roman art and genius. No writer has rivalled Virgil in the charms of his diction, or the elaborate beauty of his phraseology: and the poem before us is Virgil's most absolute and complete performance. It contains no careless passages, by improving which a translator may hope to atone for inferiority, where his original is distinguished by unusual delicacy or vigour. There is here no current of narration, which, by interesting the reader in the progress of events, may prevent him from observing very carefully the finishing and felicity of the expression. These, from the very nature of the case, must generally evaporate in the transfusion from one language into another. Mr Sotheby, however, has discharged his arduous undertaking with great and unusual success. He has run the same

* It does not seem to be generally known, in this country, that the *Oberon* of Wieland is itself a translation from an old French Romance, entitled, *Sir Huon of Bourdeaux*. The German poet has improved and decorated the fable with much ingenuity, but its groundwork is not altered. The ornaments, too, of the romance and of the poem, are usually similar. M. Petit de la Croix is said to have been largely indebted to the same book in his *Persian Tales*. The romance seems not to be of a date prior to the invention of printing.

same race with some of the first and most celebrated worthies of English poetry, and he has manifestly distanced his competitors. He will not thank us for indiscriminate approbation; and his pretensions, even in the attempt to translate the *Georgics*, are so extremely high, that he must excuse us, if at any time we may seem fastidious in pointing out what we think defects in its execution.

One objection, *in limine*, we feel ourselves called upon to make, to the Darwinian modulation with which Mr Sotheby's versification is infected. Of this tendency in the author we were not apprised till we entered upon the present work. His *Oberon*, by which he was principally known to us before, is written in the stanza metre, to which the false decorations which Dr Darwin has introduced into the common iambic measure, are not to be easily transferred. They are ornaments which can scarcely be worn but with a particular habit. We think ourselves fortunate that, at entering upon Mr Sotheby's version of the *Georgics*, we had no previous knowledge of his connexion with this school of writing. Such an impression would have excited in us so violent a prejudice against the man who could think of violating the matron-like simplicity of the Mantuan bard, with glittering and meretricious graces, that we could hardly have reduced ourselves to the temperament of impartial judges; and in our indignation at the deserters from genuine English, we should not perhaps have been able to discover that, though Mr Sotheby had made several excursions into the enemy's country, and, in some instances, imbibed their manners, and acquired their complexion, yet that at the bottom he was a native still, and redeemed his delinquency by many and unsophisticated excellences.

The reader, however, will not doubt but that we can substantiate our charge of *Darwinianism*, after he has perused the following passages.

B. II. 323. *Ver adeo frondi nemorum*, &c. is thus translated :

' Spring comes, new bud the field, the flow'r, the grove
Earth swells, and claims the genial seeds of love :
Æther, great lord of life, his wings extends,
And on the bosom of his bride descends,
With show'rs prolific feeds the vast embrace
'That fills all nature, and renews her race.
Birds on their branches hymeneals sing,
The pastur'd meads with bridal echoes ring :
Bath'd in soft dew, and faun'd by western winds,
Each field its bosom to the gale unbinds :
The blade dares boldly rise new suns beneath,
The tender vine puts forth her flexile wreath,
And, freed from southern blast and northern shower,
Spreads without fear, each blossom, leaf, and flower.'

IV. 30. *Hæc circum casia, &c.*

'There all her sweets let savoury exhale,
Thyme breathe her soul of fragrance on the gale,
In dulcet streams her roots green casia lave,
And beds of violets drink at will the wave.'

IV. 236. *Illis ira modum supra est, &c.*

'The injur'd swarms with rage insatiate glow,
Barb every shaft, and poison every blow,
Deem life itself to vengeance well resign'd,
Die on the wound, and leave their stings behind.'

This last passage is happily rendered; but we are inclined to suspect that the translator fancied the bees of Virgil to have ranged in gardens particularly dedicated to botany; that they were protected by 'aerial powers hovering round,' who pointed their stings, and animated 'their tiny bands' to vengeance.

A literal uninjured transmission of sentiment from a dead into a living language is generally impossible. Adherence to the letter, where it enervates the spirit, is the most unpardonable infidelity: and a certain degree of licence, in consideration of the difficulty attending on his office, is allowed to the poetical translator; as, in diplomacy, considerable discretionary powers are vested in the ambassador at a distant court. A poet has authority entrusted to him, to complete a picture of which the outlines only are suggested by his original; and, while he preserves the character of the landscape, to vary the light and shade with which it is invested. But this licence, which is never to be used rashly, is always dangerous in the application. It requires a taste more than usually accurate, a thorough perception of that mind, the scope and lineaments of which are to be expressed, and a kindred spirit. It is carried, perhaps, to its greatest allowable extent, where Dryden, in his translation of the 12th *Æneid*, having described Iuturna precipitating herself into the river Tiber, from the effect of a phrenzied and sorrowful despair, adds, with happy audacity to the description of Virgil, that celebrated line,

'And her last sobs came bubbling up in air.'

We could point out many instances in which Mr Sotheby has used the same bold freedom with felicity. To the description of the manner in which the bees recruit their wasting numbers, is added, with great happiness, in the translation before us, the season of the year when the hive may most poetically be supposed to acquire this fabled accession to its citizens. B. IV. v. 255. of the translation,

'By instinct led, at spring-tide's genial hour,
They gather all the race from herb and flower.'

So also, B. II. 149. *Hic ver assiduum atque alienis mensibus ætas,*

is converted, with great taste, into a description more vivid and particular,

‘ And winter wears a wreath of summer flowers.’

We do not think it fair to attribute the *whole* merit of these elegancies to the rhyme; though rhyme, probably, is as often the connecting cause of poetical invention, as the bond by which it is constrained. We attribute great merit to Mr Sotheby for the translation of these passages; but we have to complain, that though he is to be commended for having often varied, judiciously, the drapery, he has also often violated the costume of Virgil.

The celebrated lines, B. I. 328. *Ipse pater media nimborum in nocte*, &c. are rendered by Dryden with great spirit. The present translation has the merit of more stately versification, and greater fidelity.

‘ The Thunderer, thron’d in clouds, with darkness crown’d,
Bares his red arm, and flashes lightnings round.
The beasts are fled: earth rocks from pole to pole,
Fear walks the world, and bows the astonish’d soul:
Jove rives with fiery bolts Ceraunia’s brow,
Or Athos blazing ’mid eternal snow.’

It is to be regretted that, after having executed the rest so well, the translator should have deviated from his original, for the purpose of introducing so quaint an antithesis as this, between the cold snow and the hot thunderbolt which blazed on Athos. Had he been busied with the snowy mantle, the icy beard, and the rivers which trickle down the chin of Atlas, in the fourth *Æneid*, we would have excused a similar addition to the picture, but here every thing is grand and simple.

This ‘blazing amid snow’ belongs, indeed, partly to a vitiated mode of expression, to which Mr Sotheby is partial. Book II. line 82. of the translation, we have ‘toils that never tire,’ without any perceivable reason why they should not produce the usual effect of toil: Book I. 114. Tr. ‘The chill north blisters as it blows:’ I. 378. Tr., and again, IV. 645. Tr. ‘The river freezes as it flows:’ I. 94. Tr. The vetch and lupine ‘Bow’d to the gale, and rattled as it blew:’ Book IV. 305. Why should Virgil’s, *Zephyris primum impellentibus undis*, be translated,

— when first young zephyr laves

His sportive pinions in the vernal waves.’

III. 49. *Seu quis Olympiæ miratus præmia palmæ?*

‘Does fame for Pisa’s palm the courser rear?’

In these, and in other passages, why should metaphorical agency be introduced where Virgil, ‘the great master of proprieties,’ uses the language of simple precept?

A similar admixture of injudicious circumstances, or affected expression, is a blemish to this work in many of its most interest-
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ing parts; and it is a blemish from which the original is free, beyond all other writers. We wish that Mr Sotheby, in preparing a new edition of his version, which, we believe, is loudly called for, would discard such prettinesses, and assume a dignity more worthy his own talents, and the majesty of his incomparable author. The task will not be a long or tedious one,

To rip the *unsel* / ' from the satin,

Of that pure uncorrupted Latin.'

That he is competent to better things, no person can doubt, who will read his translation of that noble apostrophe to rustic happiness, II. 459. *O fortunatos nimium, &c.*

' Ah! happy swain! ah! race belov'd of heaven!

If known thy bliss, how great the blessing given!

For the just earth from her prolific beds

Far from wild war spontaneous nurture sheds.

Though nor high domes through all their portals wide

Each morn disgorge the flatterer's resolute tide;

Though nor thy gaze on gem-wrought columns rest,

The brazen bust, and gold-embroider'd vest;

Nor poisoning Tyre thy snowy fleeces soil,

Nor casia taint thy uncorrupted oil;

Yet peace is thine, and life that knows no change,

And various wealth in Nature's boundless range,

The grot, the living fount, the umbrageous glade,

And sleep on banks of moss beneath the shade;

Thine, all of tame and wild, in lawn and field,

That pastur'd plains or savage woodlands yield:

Content ~~and~~ patience youth's long toils assuage,

Repose and reverence tend declining age:

There Gods yet dwell, and, as she fled mankind,

There Justice left her last lone trace behind.'

This is admirable. We beg leave to refer also to Book I. 393 and 466; II. 136; and IV. 219.

We have already adverted to the known necessity of permitting considerable liberty of word and sentiment to a translator, that he may be able to fulfil his part with vigour and success. That this necessity has been much exaggerated by Dryden, and most of the translators who formed themselves on his model, the *Georgics* now presented to the public are a sufficient proof. It is the closest version of a classic author, that we have seen, deserving the name of poetry, and it owes much of its excellence and spirit to its fidelity. Some of its brightest passages are those which are the most literal.

Book I. 34. — *tibi brachia contrahit ingens*;

Scorpius, &c.

' Scorpius, even now, each shrinking claw confines,

And more than half his heaven to thee resigns.

Book I. 247. *Illic ut perhibent, &c.*

'There night, eternal night, and silence sleep,
And gathering darkness broods upon the deep :
Or, from our clime when fades the orient ray,
There bright Aurora beams returning day :
And when above Sol's fiery coursers glow,
Late Vesper lights his evening star below.'

If the last line but one had been still more rigidly exact, as it might easily have been, the strength and harmony of the period would not have been impaired.

We have compared some of Dryden's best passages with the parallel translation of Mr Sotheby : and though we find in Dryden a flow and exuberance of language almost peculiar to that great and interesting poet, it would be unjust not to allow to the present translator the palm of superiority. Much of Dryden's exuberance proceeds from a want of scrupulous accuracy ; but it is remarkable, that he is often indebted for his energy to an adherence to words which Mr Sotheby has too hastily forsaken, or from a preservation of individual circumstances, which Mr Sotheby has reduced to general terms.

Book I. 462. — *nam saepe videmus*

Ipsius in vultu varios errare colores.

- * For oft we find him finishing his race
With various colours erring on his face.' DRYDEN.
- * But chief observe, along his western way,
Each hue that varies at the close of day.' SOTHEBY.

In the story of Orpheus too : *Septem illi menses, &c.* The seven continued months are retained by Dryden ; while, in the present translation, we are surprised to find, 'He many a month.' Is it possible that a man, so practised in poetry as Mr Sotheby, can be ignorant how great a charm is added to the expression by a studious adherence to particulars ? Does he not know how mean and beggarly a nameless mountain would appear in comparison of 'the frosty Caucasus ?' Would he substitute 'many a sylph,' in the room of the fifty chosen guardians who protect the petticoat ; or would he consent that an indefinite sea should supplant 'the Caspian ?' But 'many a' is a favourite expression of Mr Sotheby. In the first book, it occurs four times within the space of less than forty lines ; and in the whole translation so frequently as to be disgusting.

We proceed to some detached observations on certain lines which we have selected from those which seem to require alteration, without thinking it necessary to apologize for the minuteness of our observations. Every person who has practised metrical composition, is conscious of the importance of verbal niceties and distinction ; and, as has been before mentioned, in a translation

lation of the Georgics, the strictest accuracy may justly be expected.

I. 28. '*Omnia liberius, &c.* 'And the free earth unask'd but gave the more.' *Liberius ferebat* implies, simply, *brought forth abundantly*.

I. 281. 'On Pelion Ossa upheave.' A very heavy line and harsh elision, produced by a foolish attempt at imitative harmony.

II. 130. '*Ac membris agit atra venena*, 'the draught of hell,' is very grating to our ears; and similar expressions occur more than once.

III. 139. '*Exactis gravidæ cum mensibus errant*. 'Ah! sooth her weakness!' The exclamation is misplaced. Virgil would not have prefaced his directions with an Ah! or with an O! It is easy to try the experiment on the original, and its incongruous effect will immediately be discovered.

III. 201. '*Ille volat, simul arva fuga, simul æquora versans*.

'While his fleet wings at once the earth and ocean sweep.'

Cannot poets be taught by the example of Pope's Camilla, that the Alexandrine is a very unhappy contrivance to express velocity?

III. 409. Tr. *Cicada* neither is nor ought to be an English word.

III. 417. *Stilly*; and IV. 88. *Sbrilly*, we think exceptionable.

III. 437. '*Quum positis novus exuvius, &c.*

'When cast his slough, and scorn'd his famish'd young.'

Virgil does not mean to intimate any parental negligence in the serpent; but, in saying that he leaves his young, means simply to recal that period of year when the serpent, in common with other animals, is fiercest and most irritable. '*Tum sevas aper, tum pessima tigris*.'

III. 453. Tr. 'Breath palpable to touch at once descends,

And rigid ice from matted beards depends.'

The second of these lines is an exact translation. If the tautology in the first line had been omitted, it would have been better. If the whole line, which is a gratuitous patch upon Virgil, were to be erased, better still.

IV. 127. Tr. 'All glorious to behold.' Hardly to be tolerated, even in psalmody.

IV. 296. Tr. 'She pours her pale ray.' We must enter our protest against the too common practice of introducing *pale*, *soft*, and *fair*, and other sweet monosyllables, into the accented places of heroic measure.

IV. 453. '*Non te nullius exercent minis iræ;*

*Magna tuis commissa: tibi has miserabilis Orpheus
Haudquaquam ob meritum panas, ni fata resistant,
Suscitat, et rapta graviter pro conjuge sævit.*

'Great

' Great is thy guilt ; on thy devoted head
 Indignant gods no common vengeance shed ;
 Sad Orpheus, doom'd, without a crime to mourn
 His ravish'd bride that never shall return ;' &c.

The sense of the original we conceive here to be entirely mistaken. The disasters of the young Thessalian befel him not as a punishment for any supposed 'guilt' which attached to his pursuit of Eurydice, but as the vengeance of Nemesis for his having been the involuntary occasion of her death. This involuntary crime, if it may be so called, was the 'commisum' for which Aristæus suffered. The 'Haudquaquam ob meritum' in the third line, refers not to Orpheus, but to the same unintentional offender. That actions, indifferent in themselves, from which death incidentally may have resulted, required expiation, is supported by all the concurrent evidence of antiquity.

To conclude. If this be not the most perfect translation of a classic poet now extant in our language, it assuredly is capable of being advanced to that high distinction. We acknowledge ourselves sincerely indebted to Mr Sotheby ; and we repeat our wishes, that he may be disposed to pursue the path upon which he has so happily entered. If he is inclined to rely on his general merits, as an excuse for partial inaccuracy in taste or in expression, we cannot altogether resist the plea. We think it, however, unbecoming the translator of the *Georgics*, for reasons which we have already mentioned—the didactic scheme, the finished elegance, and purity of the original. We renew, therefore, our wishes, that he would exert deserved solicitude in the revisal of his work, and that the excellence he has already attained may be an incentive to farther improvement.

Σπαρτην ελαχισ, ταυτην κοσμει.

ART. V. *Indian Recreations: Consisting chiefly of Strictures on the Domestic and Rural Economy of the Mahommedans and Hindoos.* By the Reverend W. Tennant, LL.D. M. A. S. and lately one of his Majesty's Chaplains in India. 2 Vol. 8vo. pp. 834. Edinburgh, Anderson : London, Longman & Rees. 1803.

FROM the earliest times, India has attracted the commercial enterprise of Europe, and the acquisition of the trade of that country seems almost to have fixed an era in the civilization of the nations by whom it has been successively engrossed. By England it has been cultivated to a far greater extent than by any other people. To our monopoly of this ancient and favourite branch of commerce, we have added a vast dominion ; and every discussion or research connected with that quarter of the world has

has now become of the utmost urgency and importance, as the rapidity with which our empire has been acquired has hitherto afforded us but little leisure to deliberate in what manner it might be best secured, or most advantageously governed. The great and the fundamental principle of our government, indeed, appears to us to be obvious, that the people inhabiting those kingdoms and provinces which have been reduced under our dominion in Asia, are become in every respect subjects of the same government under which we ourselves live, and are consequently entitled to all those blessings of security and protection which that condition implies.

The improvement of the provinces of Bengal and the Carnatic ought therefore to be as much an object of attention, as the cultivation of the counties of Middlesex and Dublin; and the personal rights and civil liberty of the inhabitants of India are in every respect as much under the paternal government of the King, as the rights and privileges of the people of the united kingdom. The object of the Company being at first entirely commercial, its whole establishment was calculated to promote the views and interests of the monopoly. Finding this form of administration the most manageable, and best adapted to its immediate views, a system, in its nature entirely mercantile, and founded on the most narrow principles of policy, was extended to the government of districts and of extensive provinces. Its defects were early discovered indeed, and severely felt; but such is the force of established habits, that no improvement was adopted until Mr Pitt's bill in 1784, at which time (though much still remained to be done) the most prominent and glaring evils were undoubtedly corrected. It is to be recollected, however, that at that period the Company's possessions were inconsiderable, when compared with their present extent. A few agents could do all the business, and a small army enforce all the orders of their employers; and the power which had not then excited universal jealousy, could always command the assistance of one set of the native powers, when it was threatened with the hostility of another. Our situation in India is now extremely different. The finances of the Company are confessedly unequal to the maintenance of an army sufficient for the defence and protection of the Asiatic dominions.* The state of these possessions is such, that the presence of a few Europeans, an irruption

* To be satisfied of this, it is sufficient to look at the annual accounts laid before Parliament; the third report of the special committee, p. 83, &c.; and the Lord Viscount Melville's letter to the Chairman, dated 30th June 1801.

ruption from Persia, or an attack from the Burman empire, would shake our power to the foundation. The very extent of our possessions is their insecurity. The scattered and unconnected state of our forces, the distance at which our different military posts necessarily must be from each other, weakens our means of defence, multiplies the opportunities of attack, and renders our detachments liable to be cut off, one by one, before a sufficient body can be collected to resist the torrent, while the very assembling such a body of troops leaves a portion of country open to attack, or a prey to rebellion. When our dominions did not include the whole of the peninsula, our danger and insecurity arose from the intrigues of cabinets, or from open and avowed hostility: to counteract the one, or to avert the other, an ambassador at each court of Hindûstân was sufficient. But now the danger lies every where concealed; it is not confined to one or two spots, but extends itself over the wide and almost boundless stretch of English India. An evil so extensive might escape the vigilance even of the best constituted government; and it is not to be expected, that the youth who is ignorant of the language, manners, and customs of the people over whom he is placed, and with whom he never associates, will be able to discover or counteract the secret machinations of sedition, even if he should possess more activity than our countrymen in Asia are generally found to retain.

Upon a careful examination of the subject, it must appear, that the most effectual way to preserve India and England together for the greatest length of time, and for ~~their~~ greatest mutual advantage, is to permit the colonization of that country under proper regulations. The fate of our American colonies seems to have frightened statesmen even from taking into consideration the policy of such a measure; and their timidity has been sedulously augmented by the influence of the exclusive trade. The two cases, when compared, are however, so very dissimilar, that there is no arguing from the one to the other; and the independence of America can occasion no serious alarm as to the security of our Indian possessions, if this measure were to be adopted. The colonization of India would take place under circumstances altogether different from those under which any other settlements have hitherto been founded by English or any European nation. Few of the European colonies owe their existence to great and liberal views of policy in the parent state. Having been established by persecution, and having flourished from neglect, they were permitted during their infancy to struggle with all the difficulty and misery of their situation, without receiving any assistance whatever from the tenderness of their parent.

Their poverty, however, protected them from oppression; their distance and their wretchedness secured them from attack. Increasing in numbers, and advancing in prosperity, their hardy manner of life inspired them with the love of freedom; and, possessing within themselves every thing necessary for their support, they were aware and jealous of their importance. This prosperity, which made them more averse to dependence, inflamed the desire of the mother country to maintain them in it; and a struggle ensued, embittered with all the acrimony which the charges of rebellion and of tyranny could occasion. The Europeans who colonize India, will find themselves placed in a situation differing in every particular from that of their brethren who cultivated the wastes and woods of America. They will settle in a country inhabited by a numerous, industrious, and in many respects a highly civilized people, differing from them indeed in religion and manners, and probably inferior in vigour of character. The frequent and rapid intercourse which now subsists between the two countries, will proportionably increase, and English manners and ideas will receive a constant support in the new draughts from Europe. The principle of self-defence will oblige them to preserve a close connexion with each other, and to depend upon the parent state for assistance and support in protecting them against the insurrection of the natives, the inroads of the North, or the attacks from Europe; nor will this wealthy and prosperous colony have any reason to fear that neglect which was shown by the mother country to her weak and indigent settlements in the West. The European, by preserving that superiority which the vigour of his character gives him over the natives, will be enabled, with their assistance, to resist any external attacks to which the English empire may be exposed. But the great and essential security which will be derived from the increase of Europeans, is the effectual check which will be given to all plots and conspiracies among the native subjects of our empire. The intimate knowledge of their language and manners, which will naturally result from a more extended intercourse, will enable us to discover and counteract every step which may be taken to our prejudice; nor will the period be very distant, when a stronger and more lasting bond of union will arise, and a reciprocity of good offices attach the Indians to the English character and name.

But we must not deceive ourselves, and argue as if we had it in our power to adopt or to reject this measure at our pleasure. We forget that, even under the present system, the colonization of India is going on, and upon the worst of all principles: We forget that, though the Company can prevent an individual from settling

settling at Calcutta, the obnoxious person can elude their power, by walking to the Danish settlement of Serampore, a distance of fifteen miles, whence he can only be removed by force. A remarkable instance of this happened lately; when a number of Baptist missionaries, wishing to settle at Calcutta, and being prevented by the authority of the Directors, immediately left the Presidency, and went to Serampore, where they were permitted to enter upon the object of their mission. When the settlement of Chandernagore is restored to France, the danger and the difficulty will be increased in no small degree; and we have every thing to dread from such a *focus* of French intrigue in the very centre of our dominions. The conduct pursued by that power at Pondicherry, is a striking proof of the truth of this observation.

The great increase of our Asiatic empire has been productive of another consequence, tending evidently to shake the foundations of the present system of Indian government. When the trade was first established, the writers, factors, and merchants, who were sent out to manage the commercial concerns of the Company, were men in an inferior rank of life to those who sent them; they were accustomed to look up to the latter, as holding a higher situation in society. To them, the habits of obedience were already familiar; nor was the capacity of their masters unequal to the administration of a mercantile concern. As the Company extended their dominions, the plains of India began to offer a tempting prospect to the younger branches of our noble and ancient families, who flocked to the East to accumulate a fortune, without tainting their dignity with the stain of trade. The same feelings (greatly increased by the exercise of unlimited power, and by the indulgence of every caprice) which made them flee from the exercise of a profession, forbade them to engage in the concerns of the Company at home, the management of which fell into the hands of an equally worthy, but less noble set of men; and as the servants surpassed at home, in rank and in family-consequence, the masters whom they were obliged to obey in India, it is not difficult to perceive that, even when abroad, they would pay infinitely less regard to the authority of the Company, than the ten factors and writers of the earlier ages of its existence. This evil, it may also be observed, is not a little increased by the importance and rank which the governors of India enjoy in England. Indebted for their situation entirely to the patronage of the Crown, and usually forming a part of the hereditary branch of the Legislature, they consider themselves rather as the comptrollers of the Company than the ministers of its power; and there is reason to believe, that the

Directors have had to regret, more than once, that their power over their governors was not more extensive, and their authority better respected.

The wisdom of allowing a *free trade* has been pretty generally allowed in speculation by all statesmen, politicians and merchants, ever since the publication of the *Wealth of Nations*; but, greatly as this system has been commended, it is notorious that few have acted up to it, and that every one contrives to discover something peculiar in his own case, or in the circumstances of his own profession, to make it an exception to the general rule. In no instance has this been so universal as in the case of the commerce between Europe and Asia; and in every nation of Europe, it has been confidently asserted, that the trade of India must be committed to the charge of an exclusive company. This more general exception originally proceeded, in a great measure, from the prejudices of mankind in favour of this commerce, which tempted them to buy with a high bribe from their respective governments, exclusive privileges and extensive power. In the present day, the defence of this false policy rests very much upon an inference, which is wholly inaccurate, from the historical origin of those companies. They were founded at a time when the capital of individuals was undoubtedly unequal to the task of fitting out vessels for so long a voyage, and for establishing factories in Asia to collect and provide proper cargoes. But the true inference from this is only, that Europe was not at that period ready to engage in such remote enterprises of trade; that the capital then embarked in commerce, was insufficient, without extraordinary privileges, to carry on the Asiatic branch; and that nothing but the hope of exorbitant profits, which at times attend new adventures when protected by exclusive rights, could have withdrawn so much capital from more profitable and natural employments nearer home. That division of capital which is required for the maintenance of foreign commerce, has already taken place. The merchants who reside in India are possessed of sufficient wealth, skill and industry, to purchase and collect the various productions which it is the object of European capital to bring to this quarter of the world. But, owing to the restrictions to which this trade is at present subjected, the Indian capitalists are not only employed in collecting goods from all parts of the Asiatic continent, but are also employed in sending these productions to England. If a more liberal system were to be adopted, these capitalists would most probably find a sufficient occupation in collecting and assorting the goods for the European market, and the carrying trade would fall into the hands of English European capitalists. Of this fact, that the capitals

capitals of individuals are now fully equal to carry on the commerce of Asia, the state of the private and foreign trade affords the most satisfactory proof; the more so, as those engaged in it are able to contend with all the advantages which the India Company enjoy as lords of the soil, and proprietors of the exclusive trade. The instance of the Anglo-Americans is particularly strong; for if they who are so far our inferiors in skill, capital, and every other commercial facility, find it for their advantage to send their ships to India, to carry their goods to America, where they are landed, and to reship those goods for the supply of the European market, it must surely be within the reach of English adventure to engage in that trade, which is able to bear so circuitous and so expensive a voyage even without taking into account the loss of time and the damage which the goods must suffer from their being landed and reshipped in America.

The same conclusion must follow, whether the capital which is employed in this roundabout trade be understood to be English or American. If it be English capital (no matter whether European or Asiatic) it is a positive and unanswerable demonstration, that the same capital which embraces the roundabout, is fully equal to the maintenance of the direct trade, and that it would not only be equal to this direct trade, but that it would afford a considerable profit, which might be advantageously employed in promoting and carrying on our manufactures and commerce. This profit is now given up to the Anglo-Americans, for the expence of landing and reshipping the goods, and as the difference between the length of the near and roundabout voyage. The importance and the magnitude of this American trade, is not, we believe, sufficiently known or attended to. According to accounts laid before Congress, the amount of Indian goods landed in the United States for re-exportation, was, in 1790, 2,000,000 of dollars; in 1800, 39,000,000 of dollars: and this enormous increase was understood to have arisen almost entirely from the Indian trade having been opened in the interval by the treaty between the two countries in 1794. The advantages which England would derive from this trade being carried on by English ships and English sailors (European and Asiatic) instead of American ships, must be evident to every one, and would infallibly be secured, if the English trader were relieved from those restraints to which he is at present subjected.*

The more the system of Indian monopoly is considered in its effects, the more singularly mischievous it will appear. It destroys a direct trade between two parts of the same empire; it

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forces

* See, upon this subject, an interesting passage relative to the fur trade, in Sir Alexander Mackenzie's *Voyages in North America*, *Introd.*

forces the capital which would naturally be employed in this trade into a roundabout trade, at the same time obliging this capital to employ in the roundabout trade, foreign ships and foreign sailors, while, in the direct trade, English ships and English sailors would naturally be used; or, it forces English capital out of this trade altogether, and discourages our own industry in behalf of that of our rivals.

But the wisdom and policy of this measure is defended, because every nation which has had any share in the trade of India, has uniformly adopted the same plan, and has entrusted its management to the direction of an exclusive company! The fact is undeniable: but unless the utter ruin of every monopoly which has engaged in this trade, can be considered as an argument in favour of the system, it must still remain liable to those objections to which it has so long been exposed. The same scenes of dissipation abroad, of large profits for a while at home, and of subsequent ruin every where, forms the history of them all; and the Dutch, the Swedish, the Danish, and the French companies, have fulfilled, in their turn, the same melancholy destiny. Even that arch-monopoly of England has more than once experienced the fate of its less wealthy competitors; nay, at this very moment, she exists but by the forbearance of the country. Since the renewal of her charter in 1794, she has been confessedly unable to fulfil her agreement with Government; and the weight of her debts bids fair again to subject her to that fate which is the necessary end of all exclusive companies.*

The bad success which attended the private adventures from France, when the trade between that country and India was thrown open, has been triumphantly quoted as an unanswerable proof of the inadequacy of individual capital to carry on the trade of Asia. It may be observed, in the first place, that the commercial adventures of the exclusive companies of that country, have not been attended with any better fortune, while it may be suggested that the ill-directed and puny attempts of the French traders can never be compared with the great and extensive enterprises of the English merchant; and the failure of their adventures must be ascribed to the same cause which occasioned the failure of the more early private adventures from the European nations, arising from the want of capital and other commercial facilities; and in the third place, the instances of the Portuguese, (who, during their career of Indian prosperity, had no exclusive company, the establishments in that country belonging to the state), the private traders and the Anglo-Americans, are perfectly sufficient to point out the fallacy of this confident assertion.

These

* *Vide Third Special Report, p. 86. & seqq.*

These observations are of consequence, as they prove, in the first place, That the capital of individuals is now equal to carry on the trade of Asia. 2. That the India Company do not supply the European markets sufficiently, *et vice versa*. 3. That notwithstanding the additional supply which the private and foreign traders furnish, the demand for Indian productions is far from being satisfied, as these goods still bear a monopoly price, the expence of the roundabout trade acting as such upon the sale of these commodities.

It would lead us far beyond our proper limits, if we were to attempt to enter into an investigation of all the evils which the monopoly produces in the home market; 1. by keeping up the price of goods; 2. by preventing a free importation of raw materials, to be worked up partly for the supply of the European, partly for the supply of the American, and partly for the supply of the Asiatic market; 3. by preventing a free exportation of English goods to Asia. For the absurdity is, that the Company not only have the exclusive trade of their own immense dominions, but of all the east coast of Africa, of Arabia, Persia, the Burman empire, China, Japan, and all the Asiatic islands. With these countries we have at present no trade; but if the activity of individuals were not fettered by these unjust regulations, there is not the smallest doubt that they would soon open new and extensive markets for the sale of English manufactures. It will be said, indeed, that this is mere speculation; that it is impossible to carry it into practice; that the habits and the opinions of the inhabitants of these countries are so hostile to any intercourse with Europeans, that the Company have never been able to establish any connexion with them. We are completely aware, that the Company has not established any intercourse with these countries; but we know also, that the Company have no immediate interest in the extension and sale of English goods, and that the young gentlemen under the Company are not of that rank of life, and have not received that education which should fit them for such occupations. We know also, that it is the interest of the Company that these connexions should be checked, and not encouraged; for the larger the supply brought home, the less will be the profits and the greater the expence; while the smaller the quantity of goods imported, the profits will be the larger.

But it is in the Asiatic part of our empire, that the effects of the monopoly are principally felt; and the prosperity of millions is sacrificed to a system, which by many is thought ruinous, by all doubtful. The conduct of the Dutch in the Spice islands, has been justly held up to the disapprobation of the world; yet that conduct was only the natural policy of an exclusive trade; and

though the English Company does not now actually destroy fields of rice, or plough up the poppies when there is too abundant a crop,* the same miserable effects are produced from the operation of the monopoly. The investment of the Company is far from being equal to the export trade of the Peninsula *alone*, putting the rest of Asia out of the question. To keep the price of goods in India from rising, to prevent them falling at home, every rival that they can exclude is shut out from the markets of India. From the want of competition, the manufacturers are obliged to sell their goods lower than they would otherwise do. Every inducement to exertion is cut off, every means of improvement is destroyed. They can supply no more labour than the demand of the market is permitted to encourage, and the vast population of India is condemned to remain for ever in a state of wretchedness and poverty. The poverty of the manufacturer affects the prosperity of the husbandman; the want of a market destroys the supply; and the whole state must advance, with the most rapid strides, to degradation and decay.

That we do not indulge ourselves in too melancholy a view of the situation of the Company, our readers may be convinced by consulting p. 86. & *seqq.* of the 3d Report of the Special Committee of the Directors, in which the difficulties of the Company are sufficiently, though not fully exposed; and the statements contained in the accounts annually laid before Parliament.

From these documents it appears clearly, that during the four years ending in 1801, the Company have been adding to their debt at the rate of *one million one hundred thousand per annum*, to enable them to defray the expences of government, and to transmit the usual investments to this country; that the private and neutral trade has increased in the same period from 1,978,190*l.* to no less than 3,580,103*l.*, while the sales of the Company have diminished from 8,337,066*l.* to 6,648,028*l.*, and that the debt owing by the Company has increased from 9,600,000*l.* to 23,000,000*l.* between the years 1787 and 1803, even without reckoning the sums due to government in the form of public participation, which have never been paid since 1794, and must now amount to at least 4,500,000*l.* From the latest accounts which bring these statements down to the year 1802-3 (Parliamentary Debates, 1803, Vol. VII. p. 337.), it appears that the whole concern is worse for that last year than the preceding by 1,272,880*l.*,

* It is, however, strongly asserted, that a quantity of opium was very lately burnt even in the streets of our Indian metropolis. How much better is such conduct than that of the Dutchmen, which has been so deservedly execrated! (Henchman's Observations, p. 233.)

1,272,880l. although it had been said that, during that year, the Company would be in a condition to appropriate a whole million as a sinking fund for the extinction of their debt.

Desperate, however, as the condition of the Company appears to be, there is no danger of it speedily committing an act of bankruptcy; and though it will continue to add largely to its debts, it will still find money enough to borrow. It is most important to inquire in what manner this is brought about, and to consider to what consequences it ultimately leads. By laying before Parliament, yearly, the accounts relative to the East India Company, and certain resolutions of approbation and acquiescence being constantly passed, the legislature, in fact, has held out the credit of the country as the security to which the creditors of the Company are to look forward in case of its failure. The assets and debts of the Company pass unnoticed; they never enter into the consideration of those who are desirous of lending money to the Directors. There is not a man indeed in England, who doubts that if the Company should fail, the country would adopt the debt of 23 millions as its own; and there is not a man who would hesitate to recommend that measure. Is it not better, therefore, that the country should adopt the debt *now*, when it is comparatively small, than permit it to go on accumulating under the bad management of the Company, having no controul over its increase, and in fact incurring a large debt which is borrowed for the advantage of individual merchants, not for the expence of government—always recollecting that the effect of the present system of monopoly is to diminish and destroy the resources of that country from which the interest of the debt ought to come in the same ratio as the debt itself increases?

The interest and importance of the subject has led us perhaps rather too far into these general observations; and we are somewhat ashamed to think that we have not yet introduced the name of Dr Tennant to the notice of our readers. To those, however, who are acquainted with any thing in the work before us beyond the title-page, we probably will not appear to have indulged in any speculations that are not fairly suggested by the tenor of its contents. The title indeed we think most unfortunately chosen; and acknowledge, that it led us to expect nothing better than a treatise upon the sports and amusements of Bengal, interspersed with the lively sallies and moral reflections of the reverend author. It turns out, however, to be a collection of dissertations and statements upon some of the most curious and important subjects connected with the political and agricultural economy

economy of the *Hindoo*, expressed in a very disagreeable style, and arranged without the smallest regard to the connexion of the different subjects. It appears, indeed, that this confusion was altogether voluntary on the part of the author, and that he claims considerable merit for the faults of his arrangement. In his Preface to Vol. II. he says, that a perfect arrangement of the different parts of rural economy has not been so much studied as variety, and that it has been thought eligible to relieve the attention by introducing other topics, less tedious, and more interesting to the generality of readers.

In the Preface to his first volume, the author informs us, that his book contains information, the greater part of which is the result of his own personal observation; but that, in order to make it more complete, he has consulted the works of Sir W. Jones, Dr Roxburgh, Dr Hunter, Dr Fontana, and Captain Hardwick. This, we must acknowledge, is not exactly the account we should have given of the volumes before us: we do not remember to have often seen a work of this magnitude so entirely destitute of any claim to originality. So far from the *greater part* of the work being the result of actual observation, there is not one single fact, of any consequence, which is not taken from some other person. Wherever the author endeavours to give any information from himself, it is sure to be inaccurate and contradictory. It does not appear that he has even read over his compilation after it was put together; for he has taken no pains to reconcile the jarring opinions which exist in every page.

The first volume is a digest of such authors as have written upon those subjects of which our author professes to treat, without any thing new or curious being added. In Vol. II. p. 344, we are informed that there is a printed treatise, which has not been yet published, entitled, 'Remarks on the Agriculture and Commerce of Bengal, by a Civil Servant of the Company;' and of this treatise he admits that he has made ample use. But he has made still greater use of it than he is willing to allow, as may be seen by comparing the chapter beginning Vol. II. p. 344, with this treatise (which, though not published, has in part found its way into the *Asiatic Ann. Reg.* 1802, pp. 47. 53. 71.) From the same treatise, the materials, and, in many instances, the very language of the chapters beginning Vol. II. pp. 1. 8. 73. 289. 297. 304. 321. 328. 337. 344. are taken. The account of the cultivation of the sugar-cane is taken word for word from Dr Roxburgh's Memoir, which has been before the Public for some time, and may be found in the *As. An. Reg.* 1802, Miscellaneous.

cel. Tracts, p. 7. The description of the attempts made to introduce the cochineal into Bengal, is also a copy of Dr Fontano, to be found in the same work for 1799. The account of the agricultural processes in the Doab, p. 274, is the production of Captain Moor. The description of the fort of Allahabad, and of the adjacent country, p. 241 to p. 252, is the exact copy of a letter from an officer in the army to his friend in this country, inserted in the Farmer's Magazine, Vol. III. p. 435.

Dr Tennant is also guilty of a practice extremely common with all those who have visited India; we mean, the custom of making use of Asiatic phrases, without explaining their meaning. This is always inconvenient, but it is quite intolerable where the value of the work depends upon an acquaintance with the weights and measures the author uses, as compared with those of England. Yet so it is, that the author never once thinks of even telling us the value of the different measures he mentions, and does not even confine himself to one set, but uses, indiscriminately, measures of different capacities under the same denomination.

It gives us great concern to remark, that the Doctor's partiality to his native country has sometimes manifested itself in a way which may expose him to the ridicule of our southern neighbours. He recommends, as an improvement upon the unclosed state of Bengal, the use of stone dykes or walls; forgetting that what is in a great measure the offspring of necessity in Scotland, would prove a very expensive mode of improvement in the flats of Bengal, where there is not a stone to be found; and we are afraid some obstinate Englishmen will continue to prefer the beauty and comfort of a hedge, to the less apparent advantages of a dyke.

We feel still more deeply, however, for that unfortunate negligence which has led the Doctor to furnish so many new apologies for those English prejudices which have so long prevailed against our classical learning and skill in prosody. Dr Tennant's work is full of quotations; but they are so inaccurately given, that it is not always easy to recognize them.

In his application of what Lucan said of Cesar to a certain merchant of Calcutta, we have the following harmonious line:

'Nil actum reputans donec aliquid superesset agendum.'

Upon Horace he makes similar improvements:

'Naturam licet furca expellas tamen usque recurret.'

And,

*'Celsi graviori casa
decidunt turre.'*

Nor does Virgil escape better; for we find,

'O fortunatos nimium sua si bona norunt

Agricolas ———'

And, talking of the vengeance which England would inflict upon the disloyalty of her sons in India, he exclaims,

'——— Manet alte repostum

——— Spreti injuria regni,' &c.

For inaccuracies of another kind, we refer our readers to Vol. II. p. 8. & 185. The number of harvests in p. 186, compared with the number of ploughings p. 196, and the production of opium p. 208. But almost every page will furnish an example.

The artificial and unnatural division of a people into distinct classes, is perhaps the most effectual method which could have been derived by the ingenuity of man to check their improvement and repress their industry. Indeed, the natural operation of such an institution is so diametrically opposite to, and incompatible with the strongest principles of our nature, that we are inclined to believe that its existence (in a perfect state) is altogether ideal, and if it had ever been completely carried into practice, the baneful effect would have been so immediate, that the total annihilation of public spirit and enterprise would have been the inevitable consequence.

We therefore cannot help doubting, that most authors have, from various very obvious reasons, been led to exaggerate a little in their description of this phenomenon in the constitution of Hindû society. We are the more inclined to adopt this opinion, as we find that many intelligent writers do not by any means confirm the perfect separation of these casts in their intercourse with society; and it is to be remarked, that the later authors, who have had the best opportunities of observing with accuracy, are those who have given us this more probable account.

We shall not stop, however, to examine the various accounts which have been given of this very curious and highly interesting subject. The well known division into four casts, need hardly be mentioned, viz. 1. The *Brahmans*, who constitute the highest class, and from whom the priests are chosen, for all Brahmins are not priests: 2. The *Katry*, to which class all princes or rajahs belong; and, according to some, the whole tribe of rajpoots. 3. The *Bhyre*, or Banian cast, under which are enumerated all who cultivate the land, tend the cattle, buy and sell; 4. The *Sordera*, or *Sutras*, to which class belong all artisans and labourers of every description. There are, besides, a numerous body of outcasts, designated chandalahs or pariahs, who are subdivided into two great

great classes, the Pariahs and Sariperes, who have no connexion with each other. According to some, there is an adventitious class which is called *Bûrum Shunker*,* and ranks after the Sudra, and to it belongs all artizans, who are again ranged in tribes according to their professions. These great classes have been divided and subdivided a thousand different ways, by different authors, no one agreeing altogether with another. In order to show the obscurity in which this subject is left, and point out the contradictions of various authors, we only take notice of the following. Dr Tennant says, 'A Hindoo of the higher order *cannot* contract a marriage with any inferior class to her own.' Vol. I. p. 119. In the fifth volume of the Asiatic Researches, Mr Colebrook gives us an enumeration of the principal mixt classes which have sprung *from the intermarriages* of the original *casts*; and we have little hesitation in adopting this opinion, and totally rejecting that stated by Dr Tennant, as we conceive such an artificial society to be literally incompatible with the nature of man, and the constitution of civil society. A brahman is not prevented from exercising an employment which is the usual occupation of any of the inferior tribes; and we thus find him a statesman, a cultivator of the ground (*ryut*), and even serving in the ranks. *Asiat. Reg.* 1799. p. 5. note). Nay, he is obliged at times to submit to the most mortifying and degrading duties. Colonel Jones, in his account of the Mahrattas, says that he has frequently known brahmans of a very high rank pressed to carry the baggage of travellers, when none of the inferior casts were to be found. It would lead us far beyond our proper bounds to multiply similar instances. But it may be observed, that the brahman, in his military capacity, is obliged to serve with individuals not only of the inferior tribes, but even at times with the outcasts. The blood of a brahman, it is true, cannot be shed; but it did not require much ingenuity to find out, that by *suffocation* the law was easily evaded, and justice satisfied. Most of our accounts of the brahminical institutions are taken from books, and not from actual observation; and our observations have been confined almost entirely to the provinces of Bengal. What the state of society was in the Mysore under Tippoo, in the Carnatic, &c. we have no account; but, from the despotic power of these princes, and of the early conquerors of India, there is little reason to believe that the brahmans retained any great privileges; and in the older provinces of our empire, the justice of England has equally subjected to its rules the brahman and the outcast.

The

* According to Mr Halhead, *Burum Shunker* is the denomination given to all those produced by the intermarriage of two classes.

The bad effects of the Hindû system, imperfectly as we believe it to be enforced, is however every where apparent. The power of the brahmanas, or more properly the influence of superstition, is such, as to be incompatible with the existence of a prosperous or flourishing country; and there can be no well regulated and efficient government, when the deluded inhabitants are restricted in the choice of their food, and condemned, by the tenets of their religion, to poverty and wretchedness. As the observance of external forms constitutes the chief object of the Indian's worship, the sublime notion of a supreme Being is lost amidst a crowd of inferior deities; and the moral principle of the follower of Brahma is blunted by the example of their priests, and destroyed by the efficacy of penances and expiations.* In this, however, the Hindû religion is so far from being singular, that it has merely followed the natural progress of all superstitions. Even the pure and sublime morality of the Christian system did not escape the taint of human imperfection; and, previous to the great work of the Reformation, the lives of the priests, and the sale of indulgences, had produced nearly the same effects in Europe as the same causes appear to have done in India.

At this period of their progress, therefore, it probably would not be difficult to gain over a great part of the people from their prevailing superstition; and the success which has attended the Baptist mission at Serampore gives ground to believe, that the exertions of the Established Church, supported by the power and influence of government, would be able to make a rapid progress in the conversion and consequent moral improvement of the Hindûs. The greatest obstacle to the conversion of any of the disciples of Brahma, is the loss of cast which follows their desertion of their religion. It would therefore be proper for the government to adopt such measures as may be necessary for the employment and protection of those who have sacrificed their worldly concerns for the sake of everlasting happiness. The melancholy fate of those whom the zeal of the Baptist mission at Serampore converted to the Christian faith, points out the necessity of adopting some such measure; and it is well worthy the attention of our modern government to inquire how far it would be right to extend a like protection to this deserving part of the natives or outcasts.

The

The Hindûs are reported to have *thirty crore* of deities, and their worship enjoins the observance of upwards of *twenty* festivals in the year, some of which engage the whole time of the worshippers for four or five days.

The agriculture of the Hindûs is wretched in the extreme. The rudeness of their implements, the slovenliness of their practice, and their total ignorance of the most simple principles of the science, are all equally remarkable. The husbandry of the south of Europe is bad; but, when compared to that of India, it is perfection. Amidst the ignorance and poverty which disgrace the once fertile provinces of Spain and Italy, we find traces of their former excellence, and we can, without difficulty, perceive in their tools the resemblance of those which were in use two thousand years ago. No such traces of former superiority are displayed in the husbandry of India; and the rudeness and unsuitness of all their implements is a most curious instance of want of contrivance and ingenuity, in a people who have arrived at a certain degree of civilization.

The Hindû farmer is generally obliged to *scratch* his field four times over before he is able to produce the semblance of mould; and, even then, except in light land, the field remains full of dirt and rubbish, and has by no means the appearance of land prepared for seed. In some instances, it is necessary to plough the field *fifteen* times over in every direction, before it is fit for sowing. The harrow is still more wretched than the plough. It will scarcely be believed that the *highly civilized* inhabitant of Hindûstan has no other substitute for that necessary tool, than a bough broken from the nearest tree. The engine used for a roller is equally cumbrous and unserviceable, resembling a ladder of 18 feet long, and drawn by four bullocks, which are guided by two men, who stand upon the instrument, in order to increase its weight.

Unfit as these implements are for the cultivation of the ground, in general, they are particularly ill-suited for the new and loamy country of Bengal, where all sorts of weeds grow particularly strong and thick, as in every country in the same circumstances. The spontaneous growth of vegetables and underwood of all sorts, makes the culture of land an operation of much time, of great labour, and of vast expence. We accordingly find, that the cultivation of the Dewannee provinces is far less perfect than that of the lighter soils in the upper country. The best cultivated district in this part of India, seems to extend from Mongheer in Bahar to Mirzapore. In the neighbourhood of Mongheer and Patna, indeed, the utmost activity and industry prevail.

The more glaring defects of the Hindû agriculture may be conceived from the following short statement. 1. The use of manure is entirely unknown in most districts, and, where it is at all used, it is in such small quantities as not to form any material object of attention. 2. The rotation of crops is entirely unknown.

The

The only object of the Hindû farmer, is to raise as many white crops as his land will bear. When it is entirely exhausted he permits it to lie waste until it regains its productive powers, when the same course of cropping is again pursued. In the vicinity of Allahabad, when the field is exhausted, they turn in sheep to manure it. 3. The total want of green crops is a formidable check to the improvement of any country, but more especially of such a country as Hindûstan. Without such a species of cropping, the whole system must be bad, the quantity of dung produced must be trifling, and the stock of an inferior and beggarly description. 4. From the want of artificial grasses, the skill of the farmer and the improvement of the country at large is confined within narrow bounds, where the country is for so considerable a period deprived of all kind of vegetation by the excessive heats. 5. In the choice of the proper seasons for ploughing and sowing, the Hindû is equally defective. 6. The barbarous system of sowing two and three species of grain in one field, is of itself sufficient to establish the character of Hindu husbandry. 7. The mode of reaping is equally defective; if two or three species of grain are sown in the same field, the Indian husbandman treads down a great part of his crop in order to collect each kind separately: indeed, so fond is he of this method of proceeding, that he pursues it even where the crop is all of one kind, that he may select what he reckons the ripest. 8. The entire want of enclosures is an evil of such magnitude, that it is impossible to calculate its extent. 9. But the great drawback to all improvement, is the insecurity of the ryot, who is still far from being completely protected, notwithstanding every thing that may have been done in his favour. The zemindar raises his demand according to the produce of the year; and though an abatement is made in an unfavourable season, the uncertainty of rent operates powerfully to check all spirit of improvement. The collection of the rents in kind is attended by all that loss and vexation which are found to accompany it in Europe. Finally, 10. In the want of capital, the farmer and the proprietor of Hindûstan feels an insurmountable obstacle to all improvement.

In the lower parts of India, the number of harvests are three; two of rice in the summer, and one of wheat, barley, and peas, in spring. It would have been entirely inconsistent with our author's inaccuracy to have mentioned the different periods at which the ploughing, sowing, and reaping, takes place. In the upper provinces, the harvests are two in number, Kheereef and Rubbeef; the former happening in September and October, the latter in March and April. The species of grain cultivated in Hindûstan are extremely numerous, and in general different from those

those which are raised in Europe. Rice is the prevailing crop in the low country; and along the course of the Jumna and Ganges, from Allahabad upwards, wheat forms the principal object of the farmer's attention.

The measures which occur in the course of this work are, for land, the cutcha and pukka biggah; the former being equal to one eighth, the latter to one third of an acre. The latter is the most generally used, and is always meant where biggah occurs without the addition of the adjective.

Grain is measured by the weight, viz. by maunds and seers. The maund is 74 lib. 10 oz. 10 dr. avoirdupois, and a fraction of no great value. Taking the average weight of a bushel of wheat at 60 lib. the maund is one bushel 15 pints. If the grain is barley at 48 lib. a bushel, the maund is 1 b. 1 p. 1 p. The seer is $\frac{1}{16}$ th part of a maund, and is equal to 1 lib. 13 oz. 13 dr.; about 2 pints. The calculations are made, taking wheat as the standard, except when barley is particularly mentioned. The maund is taken at 12 anas. This allowance is, no doubt high; but it was thought better to do so, as there was no average given. The rupee used is the Sicca rupee (2s. 6d.), consisting of 16 anas, valued at 1½d. each.

The price of gram (a species of tare) near Patna, is a rupee (2s. 6d.) for 30 seer. Rice and doht (a species of pulse) somewhat cheaper.

The system of rural economy in Hindûstan, closely resembles what in France was known by the title of the *metayer* system, but which, in fact, is to be found in all countries in a similar state of improvement. The landlord provides the seed, upon which he makes very considerable profit. The farmer pays his ploughman, partly in wages, and partly by giving him so much land for his own use. This allowance is generally about 16 biggahs, or 5 acres arable. This quantity of land can be cultivated with one plough, and, in addition to it, there is generally given an equal quantity of waste or pasture land. The interest of this lessee is merely annual. His condition is wretched in the extreme, and it appears that this class is the most indigent of all the natives of Bengal. The labourer is in all respects in a much better situation, and the wages he receives greatly exceeds the profit of the poor *metayer*.

In this country there exists a burden upon agriculture, which has no exact parallel in any other country with which we are acquainted. In the village of each zemindary, there are a certain number of officers and artificers who receive a percentage, or allowance of grain from each plough, or at each harvest. Among these is the *bhaut* or *poet*, the village-priest,

and the blacksmith. The zemindar is entitled to have his share of the work done at an inferior rate. Where a tradesman has no plough, he pays a certain sum of money. We can form no computation of the wages of these different people, as they receive payment for their work besides. In the Doonah, the tradesman is obliged to work for the allowance. This great division of labour, in the villages, is the more curious, as it does not occur in the manufactures of India. In Vol. II. p. 18. it is mentioned that the manufacturer conducts the whole process of his profession, from the formation of his tools to the sale of his production. Unable to wait the market, or anticipate its demand, he can only follow his trade when called to it by the wants of his neighbours. In the mean time, he must apply to some other employment; and agriculture is the general resource. The inconveniences and evils of this system have been long felt and acknowledged. The remedy has never been considered; and there seems but little prospect of any thing soon being done, to alleviate the misery, or improve the situation of this description of men. The introduction of English capital, skill and industry, appears to be the only resource. The indocility and prejudices of the natives have been stated as likely to render even this ineffectual: but the success which has attended the introduction of the potato and the cultivation of indigo, and the perfection which they have attained (under the direction of Europeans) in ship-building, seem to prove, that they want only the means and the opportunity of becoming a great and important addition to the strength and power of the empire.

In the two chapters commencing at p. 183. 191. vol. II. we have a detailed account of a zemindary in the neighbourhood of Benares, which is chiefly valuable for the information it contains as to those singular practices which we have noticed above. The extent of the zemindary is 4000 cutcha, or 1500 pukka biggahs (500 acres). Of this, 800 acres are under the plough; the remaining 200 are waste or pasture land. The annual rent paid to government is 900 rupees (112l. 10s.); the proprietor's share, amounting to 100 rupees (12l. 10s.) or 10 *per cent.* The number of inhabitants is 1000 living in one village, which, according to Dr Tennant, is nearly *one* person to each *Scotch acre*. We believe, if he will take the trouble of turning up p. 184. vol. II. of his own book, he will find that the 'small zemindary, of which we have lately had a description,' consists of *five hundred* acres, which is exactly *two* persons to each acre. The number of working cattle is 400. The wages of the ploughmen are five seer of the grain which happens to be in cultivation, and two rupees at each *kubwary* or ploughing season, namely, after the setting in of the rains in June, and after they break up in October. The amount

amount of these wages are 7 quarters 3 bushels 4 pecks $11\frac{1}{2}$ pints, which is within a trifle of the wages near Allahabad, as will be seen presently. The wages of the other country labourers, are 5 seers of grain, and a 25th sheaf during harvest. The reaper has a tenth of the coarse, and a twentieth of the finer grains. After all these deductions, the share of the ryut must be inconsiderable indeed. The food of the husbandman in this district consists of rice, barley, with the various kinds of pea, either separately or mixed. Wheat is only used by the higher ranks. The most substantial meal to which the lower ranks can aspire, is a sort of porridge of fried *grain*, reduced to flour by a hand-mill.

In the district about Allahabad, the whole stock of the farmer is not worth 8 rupees (20s.) exclusive of the value of his cattle. Wheat is the prevailing crop. A man and two cattle can till a biggah many times in a day. The protection of the seed and crop from the birds, is necessary all over this country. This duty falls to the lot of the women and boys, though in some parts it forms the occupation of the men.

The rate of wages in this district, and the produce of an acre, as compared with those of England, will be seen from the following table, taking, according to Sir George Shuckburgh, 1s. 5d. as the average wages of a labourer, and 7s. 10d. as the price of a bushel of wheat. In order to get real and practical information upon the subject, it is necessary to state the value of the wages, &c. in grain, the money price of labour forming no standard of comparison.

Quantity of seed to an acre in	ONE HARVEST.				WHOLE YEAR			
	Q.	B.	P.	P.	Q.	B.	P.	P.
India, - - -	0	2	3	$1\frac{1}{2}$	0	5	2	$3\frac{1}{2}$
Ditto in England, -	0	2	2	0	0	2	2	0
Produce of an acre in India,	6	7	2	3	13	7	0	6
Ditto in England, -	2	4	0	0	2	4	0	0
The rent of wheat land in India,								
18s. 9d. - - -	-	-	-	-	1	4	1	3
Ditto of arable land in England,								
14s. 2½d. - - -	-	-	-	-	1	1	0	5
The wages of a ploughman in								
India, - - -	-	-	-	-	7	1	2	4
In England, - - -	-	-	-	-	8	2	3	14

From this table it appears, that the quantity of seed sown in each country is nearly the same, while the produce is nearly treble in India. The circumstance most worthy of attention, is the high wages of the Indian. According to the usual calculations, a man in England consumes a quarter of wheat *per annum*, and the inhabitants over-head 6 bushels. Out of the remaining

7 quarters he has to pay for his house, his clothes, taxes and a variety of other things which custom has rendered necessary to his existence. The Indian labourer (for the ryot is by no means so well off) receives within one quarter of as high wages as the English peasant, without having any of those outgoings to diminish his income. If the fact is as here stated, (and it agrees with what the author himself states relative to the wages near Benares), we are at a loss to find a reason for such a singular circumstance. The labourer receives a certain allowance at certain periods of the year, entirely independent of his regular wages. From the largeness of that allowance, there is reason to think that it was fixed in a period of great prosperity, or adopted for the purpose of making the regulation of *wages* more easy. This custom prevails also in the southern part of the peninsula. Much light would be thrown upon the whole subject, if some person would communicate to the public an account of the Carnatic and the Mysore. This class of day-labourers appears now to bear a very small proportion to the *metayers*.

In Bengal, the state of the peasantry and produce of the land seems to be much inferior to what we have been contemplating in the vicinity of Benares and Allahabad. The state of the new country of Bengal must bid defiance to the skill and implements of the country; and we repeat again, that the only remedy to the evil is by introducing the industry and the capital of this country.

The farmer of the lower provinces does not depend, however, upon the cultivation of grain for the profit of his farm. It is upon the produce of his dairy, arising from the profits from the sale of milk, of curds, and of ghee (clarified butter), upon which a profit of no less than 33 *per cent.* might be made with a tolerable capital. The poultry of Bengal are of a smaller size than those of Europe. The price of a pair of good turkies in the Bengal market is about 30 rupees (3l. 15s.), for which sum you can buy 20 or 30 dozen of fowls. In the neighbourhood of Patna, turkies cost 6 rupees (15s.), fowls and ducks from six to ten ana rupees.

From the introduction of that useful root the potato, and from its adoption in some districts, we may expect great and lasting benefits to the natives of Hindûstan. The rice crops in that country are liable to such frequent destruction, and their total failure, when it happens, is likely to be so general, that it requires the utmost exertion upon the part of government to obviate the bad effects likely to arise from such a state of things. As a dry season is the most unfavourable to a rice crop, and is that in which the potato grows to the highest perfection, the advantages arising from having such a substitute, and at such a period, must be

be productive of the happiest effects. To this useful plant the benevolence of individuals has attempted to add another, the breadfruit tree; and at Madras, and upon other parts of the Coromandel coast, the propagation of that tree has been attempted with some success.

The agriculture and commerce of Bengal will derive much benefit from a proper distribution of navigable canals throughout this district; by facilitating the communication; by a proper distribution of water for irrigation; and by forming reservoirs to receive the overflowing of the rivers, which is at present a source of destruction to the crops of the unfortunate Bengalese.

The extent and population of English India comes now to be considered. The possession or influence of the Company reaches from lat. 60. north to lat. 30; for such is the magnitude of their empire, that miles are too small a measure to compute it by. The breadth of these possessions cannot be so easily determined; but the whole peninsula of India is now nearly subjected to their power. To our former possessions of Bengal, Bahar, and Benares, the present government of India has added the country lying between the Ganges and the Jumna, with the Rohilcund; Oude remains, more than ever, from its weakness, an appendage of this Presidency. From the Nizam has been taken his share of the spoils of Tippoo; the Carnatic and Tanjore have been added to our dominions; and the choice of a prime minister for the Rajah of Travancore, was the only circumstance, after he became tributary, wanting to subject that country also to our power. Possessing therefore, the Mysore, we enjoy in full sovereignty all the peninsula down to the south of the river Toombuddra. But, besides this, the Nizam has been so fond of the English ever since the French were dismissed his service, that he retains in his capital, Hydrabad, an additional garrison of our troops, to the amount of 4400 men. The Paishwah, too, has not been wanting in his proofs of attachment; and the important cessions, in the Guzerat, of the coast between Surat and Canara, together with the province of Bundelcund, must confirm the good opinion which we entertained of his wisdom and integrity, which he has still further increased by taking 8000 of our troops into his pay, and stipulating to make no treaty without our consent. (Lord Wellesley's Notes.)

The only powers in that part of the world, who seem to have been insensible of our kindness, are the Mahrattas; but they will no doubt speedily open their eyes to the force of reason and of arms. The descendant of the Moguls, when restored to the throne of his fathers, will require the assistance of a company

of English traders, in the government of his provinces, and in the collection of his revenues, which cannot possibly be in kindness refused him. This, with the addition of the province of Cuttack, and some important acquisitions in the Guzerat, and the countries between the Ganges and the Jumna, which are just united with our empire, places the whole peninsula under our dominion.

The population of this vast empire is far from being accurately known. The author of the *Indian Recreations* has copied from the same unpublished printed work, (*Asiat. Ann. Reg.* 1802, Misc. Tr. 41.), a computation of the number of inhabitants in Bengal, &c. It scarcely need be observed, that no dependence can be placed on these computations, as they assume, as facts, what we have no reason to believe to be so. The result makes the population of Bengal, Bahar, and Benares, 30 millions; and, according to the ideas of the author, the population of the English empire in India, including the country of the Nizam and Oude, will amount to between 60 and 70 millions of souls.

The resources of the commerce of this empire is by no means proportioned to its population. The nature of the government destroys every principle of industry and of action. The prosperity of so large a portion of our dominions, is undoubtedly an object of concern of no mean importance; and the consideration of this question must derive additional interest from its having been declared in Parliament, by the highest authority, that no man would be bold enough to ask for a renewal of the charter on the footing on which it at present stands. The liberties granted to the private trader will be the first step towards the proper colonization of that country: and as it is obvious that the one cannot be granted without leading to the other, it will be much better to look to it steadily, and consider seriously what is the best means to regulate and direct the change. From the improved system of government in the older provinces of the empire, few can now hope to make a fortune and return to this country, as was formerly the case. Those who go out must now leave this country with very little prospect of ever seeing it again; and not having European females to adorn and improve their society, they contribute to the production of an intermediate class of inhabitants, who have neither the education or virtues of their European parents,* nor the inoffensive and sub-
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* It is a fact extremely worthy of attention, that the officers who have disciplined and led on to action the troops of Scindia, under the direction

missive talents of their Asiatic brethren. The colonization of India, as we have before said, is going on silently and progressively, in a way equally detrimental to the interests of England, and hostile to the welfare of India. It is said, indeed, that by the unlimited emigration of Englishmen, the mother country will be depopulated, while the minds of the natives will be alienated by the disrespect which the European settlers will shew to the religion and customs of the country. But the Mahomedans who, instead of respecting, did every thing in their power to shew their detestation for the worship, and their contempt for the feelings of the inhabitants maintained an unlimited controul over them for many centuries; and though we are far from thinking that a similar conduct would be adopted by any considerable part of our countrymen, the effect of the Mahomedan conquest must have blunted the feelings and moderated the prejudices of the Hindûs.

It is proper, however, to observe, that we by no means contend for an unlimited and unrestricted settlement of India, especially during the first years of the attempt. At the same time, we conceive it would be extremely dangerous to lodge the power of restriction in the executive government, in which it seems to be the tendency of all our late measures to centre the whole patronage of India. The appointment of the three governors, and of the supreme judges, can never, indeed, by the principles of the constitution, be lodged any where else; but the choice of the inferior officers might still remain with a body of directors chosen by the proprietors of India Stock, which, in fairness to the holders, ought, as well as the debt of the Company, to be made a claim upon the credit of the country. To the same, or a similar body, might also be entrusted the licensing of those going to India, after they had complied with certain regulations as to their character and conduct.

According to the last accounts, the number of the Company's civil servants in India were 702; officers 2141; ditto of the marine 122; and of European inhabitants not in the Company's service 2318; in all 5161. To this is to be added the numbers

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direction and after the desertion of the foreign officers, during the present bloody contest, are the *natural children* of Englishmen, who, by the constitution of our Indian government, are prevented holding any situation under the Company. Will it be said that no danger arises from the increase of such a population, if not counteracted by a more effective one from Europe?

of European soldiers 24,000,* making a total of 29,161, to govern a people whose numbers amount to 70 millions! The inadequacy of this system, when opposed by rebellion, aided by European intrigue, must be apparent to every man, while the numbers are sufficient to produce a race who will eventually expel us from our eastern empire.

This question assumes new interest, from the account which our author, a chaplain in the King's service, gives of the very unsatisfactory condition of that main support of our power under the *present* circumstances of India. The European part of the army, says our author, p. 336, 'is a motley mixture of all nations; *a small bribe might engage them in any enterprise*; but they are the most debauched and unprincipled troops any where to be met with, and *would give no sufficient support* to any cause, whether good or bad.' In page 382, he adds, Great Britain has perhaps more to fear 'from the *disloyalty* of its army, than its dissipation.' Upon a Sepoy army, according to our author, must depend the safety of our possessions in India. We are ready to allow, that, under English officers, the sepoys form excellent and enterprising soldiers. But is their fidelity so tried, and their attachment to *our* cause so great, that no bribe could tempt, and no attachment to their country prevail upon them to desert? But, granting that to us they are perfectly loyal, will it be asserted that they are at all equal to those troops of France, before whom all but Englishmen have fled? or will it be maintained, that the superiority of the European, which has given India to our power, will not transfer it to those who make use of similar means to acquire it? In the late contests, were not the Mahrattas, bravely and obstinately as they fought, and officered by Europeans or their children, obliged to give way to English bravery and prowess? And is not this a pretty decisive proof, that India never can be defended against European forces by a native army alone? We have much to fear from the introduction of French troops into Hindûstan; much more from French intrigue, and more than all from the operation of those principles upon the rotten and combustible matter of our European army, upon the unsteady and sickle minds of the natives, and upon the disaffected and mutinous inhabitants of India, especially those numerous and formidable bodies who have lost all means of obtaining a livelihood, the troops formerly in the service of the

* This is the number stated by Lord Castlereagh. In fact, however, there are not much more than half that number of European troops in India.

the native princes. Unless some steps are taken to introduce a body of Europeans who may have a strong and permanent interest in the preservation of the power of England, and from their situation be capable of counteracting the intrigues of the enemy, it is impossible to say how speedy may be the downfall of our influence in India. Such a line of conduct is particularly called for at the present moment, when we consider the precarious state of our colonial empire in the West. A complete freedom of trade between India and England would at once provide an opening for that capital which the loss of the West Indies would throw out of employment, and provide the means of instantly filling up the blank which such a disaster would occasion.

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- ART. VI. *Popular Tales*. By Maria Edgeworth, author of *Practical Education*, *Castle Rackrent*, &c. &c. 8vo. 3 vol. Johnson, London, 1804.

THE design of these tales is excellent, and their tendency so truly laudable as to make amends for many faults of execution. There is nothing new, indeed, in the idea of conveying instruction in the form of an amusing narrative; for from the days of Homer downwards, almost all the writers of fictitious history have been thought to aim at the moral improvement of their readers. The means which they have employed for this purpose, however, have hitherto been but indifferently calculated to effect it. The truth is, that almost all *moral tales* which are not expressly accommodated to the taste and condition of *children*, seem to have been intended for the benefit of persons of high fashion and splendid accomplishments only; they seldom condescend to the incidents or the duties of ordinary characters or ordinary life, but are occupied entirely in adjusting the claims of nice honour and heroic affection, or in describing the delicate perplexities and fantastic distresses of those who set vulgar sorrows at defiance. Now, considering that there are in these kingdoms at least *eighty thousand* readers, it is obvious, that no great moral utility could result from the general perusal of those brilliant narratives; and that the lessons which they were calculated to teach, were quite inapplicable, to say the least of them, to that great multitude who are neither high-born nor high-bred. It is for this great and most important class of society that the volumes before us have been written; and their object is, to interest, amuse and instruct them by stories founded on the incidents of common life, and developed by the agency of ordinary characters; to withdraw their attention from those dazzling displays of fashionable

able manners, with which they have no natural connexion, and to fix it upon those scenes and occurrences which have an immediate application to their own way of life; and in this way to impress upon their minds the inestimable value and substantial dignity of industry, perseverance, prudence, good humour, and all that train of vulgar and homely virtues that have hitherto made the happiness of the world, without obtaining any great share of its admiration.

This is an attempt, we think, somewhat superior in genius, as well as utility, to the laudable exertions of Mr Thomas Paine to bring disaffection and infidelity within the comprehension of the common people, or the charitable endeavours of Messrs Wirsdworth & Co. to accommodate them with an appropriate vein of poetry. Both these were superfluities which they might have done very tolerably without; but Miss Edgeworth has undertaken, to improve, as well as to amuse them, and to bring them back from an admiration of pernicious absurdities, to a relish for the images of those things which must make the happiness of their actual existence. In this view, she rather deserves to be compared to those patriotic worthies who first ventured, after the revival of letters, to write in their native language, and to interest their countrymen in stories of their home manufacture; who spoke of love without allusion to Ovid, constructed dramas altogether independent of the Scriptures, and published tales that were not to be found in the Book of Troy. It required almost the same courage to get rid of the jargon of fashionable life, and the swarms of peers, foundlings and seducers, that infested our modern fables, as it did in those days to sweep away the mythological personages of antiquity, and to introduce characters who spoke and acted like those who were to peruse their adventures.

The success of such an experiment depends, no doubt, in a great degree, on the skill with which it is conducted; nor are we sanguine enough to hope that it will be very suddenly completed. The millinery misses and aspiring apprentices of our country towns will long hanker, we are afraid, after the elegant adventures of counts, baronesses, or Adelines, and will think every story intolerably low which does not contain anecdotes of masquerades and gaming-houses, elegiac stanzas, duels, and descriptions of the Appenines. This class will certainly be the last to be converted. But in the great and respectable multitude of English tradesmen, yeomen, and manufacturers—in that most important part of our population which consists of the well-educated in the lower and middling orders of the people, we do believe that there is so much good sense and good principle, as to secure the favourable reception of a work which professes
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to interest them by a picture of their own condition, to make them proud of their independence, and cheerful in their submission, and to point out the happiness which is placed within the reach of all who are industrious and affectionate.

Notwithstanding the unqualified praise which we are disposed to bestow on the design of this work, we cannot help observing, that the execution is extremely unequal. Many of the incidents are childish, and several of the stories unmeaning and improbable; yet they all inculcate an unexceptionable and practical morality, and are written throughout in a strain of admirable good sense, liberality, and cheerfulness. There is nothing tawdry or sophisticated about them; no idle description or affected reflection; the story moves on with uninterrupted rapidity; and the writer never seems to pause to admire her own powers of composition, or to wait for the admiration of her readers.

The best tales in the book, we think, are those entitled, 'Lame Gervas,' 'the Contrast,' and 'To-Morrow.' We shall make a few extracts from the last, which turns, as might have been expected, on the dangers of procrastination. The hero, after many mortifications and vows of reformation, is at length settled with a merchant in Philadelphia.

'No one could be more assiduous than I was for ten days; and I perceived that Mr Croft, though it was not his custom to praise, was well satisfied with my diligence. Unluckily, on the eleventh day, I put off in the morning making out an invoice, which he left for me to do; and I was persuaded, in the evening, to go out with young Mr Hudson. I had expressed, in conversation with him, some curiosity about the American *frog-concerts*; of which I had read, in modern books of travels, extraordinary accounts. Mr Hudson persuaded me to accompany him to a swamp, at some miles distance from Philadelphia, to hear one of these concerts. The performance lasted some time, and it was late before we returned to town. I went to bed tired; and waked in the morning with a cold, which I had caught by standing so long in the swamp. I lay an hour after I was called, in hopes of getting rid of my cold. When I was at last up and dressed, I recollected my invoice, and resolved to do it the first thing after breakfast; but unluckily I put it off till I had looked for some lines in Homer's "*Battle of the Frogs and Mice*." There was no Homer, as you may guess, in Mr Croft's house; and I went to a bookseller's to borrow one. He had Pope's *Iliad* and *Odyssey*; but no *Battle of the Frogs and Mice*. I walked over half the town in search of it. At length I found it; and was returning in triumph, with Homer in each pocket, when, at the door of Mr Croft's house, I found half a dozen porters, with heavy loads upon their backs

"Where are you going, my good fellows?" said I.

"To the quay, Sir, with the cargo for the *Betsey*."

"My

"My God!" cried I, "Stop.—Can't you stop a minute? I thought the Betsey was not to sail till to-morrow. Stop one minute."

"No, Sir," said they, "that we can't; for the captain bade us make what haste we could to the quay, to load her."

"I ran into the house. The captain of the Betsey was bawling in the hall, with his hat on the back of his head; Mr. Croft on the landing-place of the warehouse stairs, with open letters in his hand, and two or three of the under clerks were running different ways, with pens in their mouths.

"Mr. Basil! the invoice!" exclaimed all the clerks at once, the moment I made my appearance.

"Mr. Basil Lowe, the invoice and the copy, if you please," repeated Mr. Croft. "We have sent three messengers after you. Very extraordinary to go out at this time of day, and not even to leave word where you were to be found. Here's the captain of the Betsey has been waiting this half hour for the invoice. Well, Sir! will you go for it now? And at the same time bring me the copy, to enclose in this letter to our correspondent by post."

I stood petrified.—"Sir, the invoice, Sir!—Good Heavens! I forgot it entirely."

"You remember it now, Sir, I suppose. Keep your apologies till we have leisure. The invoices, if you please."

"The invoices! My God, Sir, I beg ten thousand pardons! They are not drawn out."

"Not drawn out.—Impossible!" said Mr. Croft.

"Then I'm off!" cried the captain, with a tremendous oath. I can't wait another tide for any clerk breathing."

"Send back the porters, Captain, if you please," said Mr. Croft, coolly. "The whole cargo must be unpacked. I took it for granted, Mr. Basil, that you had drawn the invoice, according to order, yesterday morning; and, of course, the goods were packed in the evening. I was certainly wrong in taking it for granted that you would be punctual. A man of business should take nothing for granted. This is a thing that will not occur to me again as long as I live."

"I poured forth expressions of contrition; but, apparently unmoved by them, and without anger or impatience in his manner, he turned from me as soon as the porters came back with the goods, and ordered them all to be unpacked and replaced in the warehouse. I was truly concerned."

"I believe you spent your evening yesterday with young Mr. Hudson?" said he, returning to me.

"Yes, Sir.—I am sincerely sorry——"

"Sorrow, in these cases, does no good, Sir," interrupted he. "I thought I had sufficiently warned you of the danger of forming that intimacy. Midnight carousing will not do for men of business."

"Carousing, Sir!" said I. "Give me leave to assure you that we were not carousing. We were only at a *frog-concert*."

"Mr

'Mr Croft, who had at least suppressed his displeasure till now, looked absolutely angry. He thought I was making a joke of him. When I convinced him that I was in earnest, he changed from anger to astonishment,' with a large mixture of contempt in his nasal muscles.

"A frog-concert!" repeated he. "And is it possible that any man could neglect an invoice, merely to go to hear a parcel of frogs croaking in a swamp? Sir, you will never do in a mercantile house." He walked off to the warehouse, and left me half mortified and half provoked. From this time forward all hopes of Mr Croft's friendship were at an end.' vol. 3. p. 347-353.

We add the following characteristic scene, in honour of the fair writer's countrymen. The victim of to-morrow is reduced to poverty, and obliged to pawn his watch to pay his passage home to England. It is redeemed, and sent back again by the gratitude of a poor Irishman, to whom he had advanced a small sum of money on his landing. He then goes to make his acknowledgments to his humble benefactor.

'I knocked at Mr O'Grady's door, and made my way into the parlour; where I found him, his two sons, and his wife, sitting very sociably at tea. He and the two young men rose immediately, to set me a chair.

"You are welcome, kindly welcome, Sir," said he. "This is an honour I never expected any way. Be pleased to take the seat near the fire. 'Twould be hard indeed if you *would* not have the best seat that's to be had in this house, where we none of us never should have sat, nor had seats to sit upon, but for you."

'The sons pulled off my shabby great coat, and took away my hat, and the wife made up the fire. There was something in their manner, altogether, which touched me so much, that it was with difficulty I could keep myself from bursting into tears. They saw this; and Barney (for I shall never call him any thing else) as he thought that I should like better to hear of public affairs than to speak of my own, began to ask his sons if they had *seen the day's papers*, and what news there was?

'As soon as I could command my voice, I congratulated this family upon the happy situation in which I found them; and asked by what lucky accidents they had succeeded so well?

"The luckiest accident ever *happened me*, before or since I came to America," said Barney, "was being on board the same vessel with such a man as you. If you had not given me the first lift, I had been down for good and all, and trampled under foot long and long ago. But, after that first lift, all was as easy as life. My two sons here were not taken from me—God bless you! for I never can bless you enough for that. The lads were left to work for me and with me; and we never parted, hand or heart, but just kept working on together, and put all our earnings, as fast as we got them, in the hands of that good woman, and lived hard at first, as we were bred and born to do,

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thanks be to Heaven! Then we swore against drink of all sorts entirely. And as I had occasionally served the masons, when I lived a labouring man in the county of Dublin, and knew something of that business, why, whatever I knew I made the most of, and a trowel felt no ways strange to me; so I went to work, and had higher wages at first than I deserved. The same with the two boys: one was as much of a blacksmith as would shoe a horse; and t'other a bit of a carpenter; and the one got plenty of work in the forges; and t'other in the dock yards, as a ship-carpenter. So, early and late, morning and evening, we were all at the work; and just went this way struggling even on for a twelvemonth; and found, with the high wages and constant employ we had met, that we were getting greatly better in the world. Besides, the wife was not idle. When a girl, she had seen baking, and had always a good notion of it; and just tried her hand upon it now, and found the loaves went down with the customers, and the customers coming faster and faster for them; and this was a great help. Then I grew master mason, and had my men under me, and took a house to build by the job, and that did; and then on to another, and another. And, after building many for the neighbours, 'twas fit and my turn, I thought, to build one for myself; which I did out of theirs, without wronging them of a penny. And the boys grew master-men, in their line. And when they got good coats, nobody could say against them; for they had come fairly by them, and became them well perhaps for that *reason*. So, not to be tiring you too much, we went on from good to better, and better to best. And if it pleased God to question me how it was we got on so well in the world, I should answer, Upon my conscience, myself does not know; except it be that we never made saint-menday, nor never put off till the morrow what we could do the day."

'I believe I sighed deeply at this observation, notwithstanding the comic phraseology in which it was expressed.

"But all this is no rule for a gentleman born," pursued the good-natured Barny, in answer, as I suppose, to the sigh which I uttered; "nor is it any disparagement to him if he has not done as well in a place like America, where he had not the means; not being used to brick-laying, and slaving with his hands, and striving as we did. Would it be too much liberty to ask you to drink a cup of tea, and to taste a slice of my good woman's bread and butter? And happy the day we see you eating it, and only wish we could serve you in any way whatsoever."

'I verily believe the generous fellow forgot, at this instant, that he had redeemed my watch and wife's trinkets. He would not let me thank him as much as I wished, but kept pressing upon me fresh offers of service. When he found I was going to leave America, he asked what vessel we should go in? I was really afraid to tell him, lest he should attempt to pay for my passage. But for this he had, as I afterwards found, too much delicacy of sentiment. He discovered, by questioning

questioning the captains, in what ship we were to sail; and when we went on board, we found him and his sons there to take leave of us, which they did in the most affectionate manner; and, after they were gone, we found, in the state cabin, directed to me, every thing that could be useful or agreeable to us as sea-stores for a long voyage.' vol. III. p. 374-380.

We shall venture on another extract from this tale, of a more tragical description. The incorrigible procrastinator had had his only son unsuccessfully inoculated for the small-pox. His wife urges him to have the operation repeated, and he replies—

"Undoubtedly, my dear; undoubtedly. But I think we had better have him vaccinated. I am not sure, however; but I will ask Dr ——'s opinion this day, and be guided by that. I shall see him at dinner; he has promised to dine with us."

'Some accident prevented him from coming; and I thought of writing to him the next day, but afterward put it off.—Lucy came again into my study, where she was sure to find me in the morning. "My dear," said she, "do you recollect that you desired me to defer inoculating our little boy till you could decide whether it be best to inoculate him in the common way, or the vaccine?"

"Yes, my dear, I recollect it perfectly well. I am much inclined to the vaccine. My friend, Mr L——, has had all his children vaccinated; and I just wait to see the effect."

"Oh, my love," said Lucy, "do not wait any longer; for you know we run a terrible risk of his catching the small-pox every day, every hour."

"We have run that risk, and escaped for these three years past," said I; "and, in my opinion, the boy has had the small-pox."

'So Mr and Mrs Nun thought; and you see what has happened. Remember our boy was inoculated by the same man. I am sure, ever since Mr Nun mentioned this, I never take little Basil out to walk, I never see him in a shop, I never have him in the carriage with me, without being in terror. Yesterday, a woman came to the coach-door with a child in her arms, who had a breaking out on his face. I thought it was the small-pox; and was so terrified that I had scarcely strength or presence of mind enough to draw up the glass. Our little boy was leaning out of the door to give a halfpenny to the child. My God, if that child had the small-pox!"

"My love," said I, "do not alarm yourself so terribly; the boy shall be inoculated *to-morrow*."

"To-morrow! Oh, my dearest love, do not put it off till to-morrow," said Lucy; "let him be inoculated to-day."

"Well, my dear, only keep your mind easy, and he shall be inoculated to-day, if possible; surely you must know I love the boy as well as you do, and am as anxious about him as you can be."

"I am sure of it, my love," said Lucy. "I meant no reproach. But since you have decided that the boy shall be vaccinated, let us
send

send directly for the surgeon and have it done, and then he will be safe."

"She caught hold of the bell-cord to ring for a servant—I stopped her.

"No, my dear, don't ring," said I; "for the men are both out. I have sent one to the library, for the new Letters on Education, and the other to the rational toy-shop for some things I want for the child."

"Then, if the servants are out, I had better walk to the surgeon's and bring him back with me."

"No, my dear," said I; "I must see Mr L——'s children first. I am going out immediately; I will call upon them; they are healthy children; we can have the vaccine infection from them, and I will inoculate the boy myself."

"Lucy submitted. I take a melancholy pleasure in doing her justice, by recording every argument that she used, and every persuasive word that she said to me, upon this occasion. I am anxious to show that she was not in the least to blame. I alone am guilty! I alone ought to have been the sufferer. It will scarcely be believed—I can hardly believe it myself, that, after all Lucy said to me, I delayed two hours, and stayed to finish making an extract from Rousseau's *Emilius* before I set out. When I arrived at Mr L——'s, the children were just gone out to take an airing, and I could not see them. A few hours may sometimes make all the difference between health and sickness, happiness and misery! I put off till the next day the inoculation of my child!

"In the mean time, a coachman came to me to be hired. My boy was playing about the room, and, as I afterward recollected, went close up to the man, and, while I was talking, stood examining a pinyon upon his buttons. I asked the coachman many questions, and kept him for some time in the room. Just as I agreed to take him into my service, he said he could not come to live with me till the next week, because *one of his children was ill of the small-pox*.

"These words struck me to the heart. I had a dreadful presentiment of what was to follow. I remember starting from my seat, and driving the man out of the house with violent menaces. My boy, poor innocent victim, followed, trying to pacify me, and holding me back by the skirts of my coat. I caught him up in my arms—I could not kiss him; I felt as if I was his murderer. I set him down again; indeed I trembled so violently that I could not hold him. The child ran for his mother.

"I cannot dwell on these things—Our boy sickened the next day—and the next week died in his mother's arms!" Vol. III. p. 386-391.

We would willingly make some extracts from the other tales we have specified; but, we cannot find any, to which justice could be done, without quoting a larger passage than our limits will

will easily admit. The Irish characters, who are all admirably sketched, appear to us to be the most original personages in the book. Simon O'Dougherty, in the tale called 'Rosanna,' is excellent. That horror of vulgarity which is so apt to infest the wives and children of prosperous shopkeepers, is well exposed in the tales called 'the Manufacturers,' and 'Out of debt, out of danger.' The rewards of industry are pleasingly displayed in 'Lame servas' and 'Rosanna;' and the tendency of good affections to lighten or to remedy every disaster, is prettily exemplified in 'the Contrast,' 'The Limerick Gloves,' and 'the Will,' are the most improbable and uninteresting stories in the collection; and 'the Grateful Negro' has more of the extraordinary and romantic in it, than seems suitable to the tenor and design of this publication.

We have scarcely any other remarks to offer. The pathetic parts of these tales are in general the best written; and yet the language is uniformly adapted with the greatest felicity to the character and station of the parties concerned. We could not help smiling at the partiality which has led Miss Edgeworth to represent almost all her *female* characters in so amiable and respectable a light. There is not a tale, we believe, in which there is not some wife or daughter who is generous and gentle, and prudent and cheerful: and almost all the men who behave properly, owe most of their good actions to the influence and suggestions of these lovely mistresses. If the pride of our sex would permit us, we might perhaps confess, after all, that this representation is not very far from the truth.

We cannot take our leave of these volumes, without reminding the fastidious part of our readers, that they were not written to challenge the criticism of scholars, or to gratify the taste of persons of the highest accomplishments. They are not tried by a fair standard, unless the design of writing them be kept constantly in view; and this design appears to us to be so laudably conceived, and so ably pursued, as to entitle them to more consideration than is usually bestowed on works of this description.

ART. VII. *Poems by George Richards, M. A. late Fellow of Oriel College.* 2 vol. 8vo. Oxford and London. 1803.

IT is now almost twelve years, we believe, since Mr Richards first presented himself to the Public as a candidate for poetical reputation; and from that time to the present, we do not remember to have heard much of his proceedings. The perusal of his early productions had left upon our minds the impression of luxuriant diction, considerable brilliancy and richness of versification.

tion, and a style of description somewhat florid, magnificent and diffuse. As these were all indications of a genius which time was likely to mature into excellence, and which could scarcely fail to improve by age and cultivation, we turned to the perusal of the volumes now before us with a good deal of interest, and with expectations that have not been completely realized. Mr Richards has not improved quite so much by practice as we thought there was reason to expect; he has lost something of his luxuriance, without gaining much in point of force or correctness; and his style, though less declamatory, is not more natural than at his outset; his vein of poetry certainly is not more original or abundant; and if his taste be somewhat chaster, his language is more artificial and constrained.

With all these defects, however, these little volumes are still very respectable; they are evidently the productions of an elegant and cultivated mind; of one who has studied the classical writers of antiquity with a just relish of their beauties, and learned, at the same time, to estimate the substantial merits of our great English poets. If, in his own productions, he have oftener *imitated* than *rivalled* the excellences of those illustrious models, and seldom given the reins to his imagination so freely as the career of a poet requires, he has at least copied them with gracefulness and judgment, and not only avoided the hazards of presumptuous competition, but the reproach of unworthy imitation. His genius perhaps is too much chastised and subdued by that of the masters upon whom he has formed himself; but it is saved, by their influence, from the extravagancies of the independants, and reflects a pleasing, if not a very lively image of some of the most perfect productions of the human understanding. A considerable number of passages are borrowed with great felicity; and the language possesses, upon the whole, a degree of sweetness and elegance that stamp still more clearly on the author the character of an accomplished scholar.

The first volume contains two dramas, written on the model of the ancient Greek theatre, with choruses and continuous scenes; a style of composition, of which the *Samson Agonistes* of Milton affords by far the justest and the most striking example that modern literature can boast of, though the feebler and more ornamented performances of Mason have become more popular among the uneducated part of the community.* In imitation of Mason,

Mr

* Dr Sayer's *Sketches of Northern Mythology* deserve to be mentioned with distinguished praise among productions of this kind: but the best imitation of the ancient drama we have lately met with, is the *Ingenta in Fafnis* of Goethe, translated, we believe, by Mr Taylor of Norwich. We are not acquainted with the original.

Mr Richards has attempted to give each of his plays a distinct and peculiar character. *Odin* is intended as a specimen of the wild, the sublime, and terrible; and is written, he informs us, as much as possible in the manner of *Æschylus*. *Emma* is meant to exemplify the tender and pathetic, and was composed, we imagine, upon the model of *Euripides*. We cannot say that either of them comes very near the pattern; but the first is by far the best.

The story is not very interesting. It proceeds upon the supposition that *Odin* was the chief of the *Asæ*, one of the rude nations between the *Caspian* and *Euxine* seas, who yielded to the victorious arms of *Pompey*, when he entered these regions in pursuit of *Mithridates*. This drama contains the account of the last battle that was waged by the savage monarch in defence of his country; of his resolution to sacrifice himself, with his whole tribe, after the defeat; and of his being diverted from that resolution by the appearance of a goddess who directs him to migrate to the regions of the North, where he is destined to be the founder of a mighty empire. There is nothing very new or very striking in the representation which Mr Richards gives of the character and manners of those warlike barbarians; yet every thing is correctly imagined, and smoothly executed. There is a descent to hell, and a human sacrifice described; and the women who form the chorus, abound in all those heroic and lofty sentiments which are said to have characterized the females of these nations. The mixture of feminine tenderness and weakness with this strain of magnanimity, is the most interesting circumstance perhaps in the whole drama, and affords a favourable specimen of Mr Richards' dramatical talents. We add the following passages in illustration: *

—————* Balder, I dare
To die: I scorn the wretch, who could survive
When these our towers are Roman; yet a gloom
Mournful o'erspreads my breast: I cannot hear
These monstrous engines beat against our walls,
And tremble not: Balder, I cannot gaze
On those my native fields far-seen; on shrines
Rais'd to our country's gods; on these rude hills
Cover'd so often with our warlike youth;
On yon pil'd hillocks where our fathers sleep,
And on these trophies rais'd upon the deserts
To valiant chiefs of yore: I cannot gaze,
And think how soon the Roman may possess them,
Without some mortal feelings, sad regrets,
That awe me, holding nobler thoughts enthral'd.*

Vol. I. p. 22, 23.

After

After the desperate resolution of general suicide has been adopted, the same female Chorus speaks as follows :

' This pile adorn'd with solemn sacrifice
 Answer me, a stranger as I am to fear.
 And, when I turn my eyes to yonder plains
 And vallies, which the glorious sun illumas,
 Once the domain of Odin and his Asæ,
 A sorrowful affection touches me.
 And you, ye babes, seated upon the pile,
 Unconscious of the speedy end that waits you,
 Troubled I gaze on you : you might have liv'd
 To emulate your fathers, to attain
 An equal glory, and more prosperous fortune :
 You might have crush'd these Romans, and inscrib'd
 Our rocks and mountains with your deeds of valour ;
 You might have died in all the pride of war,
 And met our heroes in Valhalla's courts :
 Now, you must fall unknown, unnam'd, unhonour'd,
 Ere yet your infant hands have grasp'd the sword,
 Or your young hearts have beat to war and glory.' p. 81, 82

When the divine command has been signified for their migration, the Chorus thus addresses the regions which they are about to abandon :

' One look, yet one look more,
 Though they be veil'd beneath the mask of night,
 Down on the valleys, dear as known in youth,
 But now more dear when to be left for ever.
 Ye verdant meads, by cooling rivers spread,
 Ye fields, on which the summer smiles, farewell :
 Farewell, ye plains, with golden harvests crown'd,
 O'er which our infant feet have roam'd : O fount
 And banks of Cyrrus, azure stream, delight
 Of virgins sporting in thy glassy wave ;
 No more shall we behold you : we must go
 Far distant : yet in other valleys, wash'd
 By other streams, we will remember you.
 Though now we dwell on higher joys, more fit
 For years mature ; yet ne'er shall the innocent bliss,
 Once known amidst your peaceful forests, want
 Grateful remembrance, but be oft recall'd
 At distance from your dells and copes green.' p. 110, 111.

The preceding extracts are rather favourable specimens of the work now before us. Among other traits of classical imitation, those who are acquainted with the style of the Greek tragedians will recognize the happy effect with which Mr Richards has introduced those extended apostrophes or invocations to places and inanimate objects, which, though in a manner proscribed by the usage

usage of modern authors, appear to have been, the favourite figure of the ancient masters of eloquence. A great part of the poetry and interest of the delightful drama of Philoctetes in Lemnos, will be found to consist in the use of it; and we think Mr Richards has shown that it may be employed with a very happy effect in the more passionate parts of English composition. Odin, when about to immolate himself, exclaims—

‘O Tanals, and ye shores

Wash'd by the sounding Euxine, Odin call,

Calls with his dying voice, while to the gods

He gives himself,’ &c. p. 92.

And the chorus, in the same spirit, adds the following classical address :

————— ‘O hills, the last

Of Odin's realm, mountains and rocks, inscrib'd

With Runic rhymes, sacred to chiefs of yore,

Ye soon shall yield to Rome! Farewell, ye plains,

Farewell, ye streams, that flowing roam the vales,

Calm Phasis, and cerulean Cyanus;

Farewell, ye shores wash'd by the Caspian wave,

Once travers'd with delight, now to the eye

Distressful, spread around with Roman tents.’ p. 24.

Though the composition be in general dignified and elegant, there are some low, and several heavy passages. A warrior, describing the agitations of Odin in his troubled sleep, says—

————— ‘high uprais'd his clenched fist

Threat'ning he shook;

an image which is absolutely ludicrous. ‘Another, while the battle is raging, calmly observes—

————— ‘A field like this,

Brave Cantimir, we saw some winters past.’

————— ‘Triarius led the Romans; we

Were headed by the Pontic King. In vain

We dar'd them to renew the fight: nine days

We stood expectant,’ &c.

All this is very tame and injudicious; though, soon after, we meet with some vigorous lines in the passage where Odin anticipates his dreary march through the desert regions of the North, ‘where not a foe shall cheer the way with conquest.’

The story of *Emma*, we think, is ill-chosen, and unskillfully conducted. We have the seduction and sentimental distress of a modern novel combined with the usages of chivalry, and presented in the form of a Grecian drama. The Public is sick, we believe, of tender-hearted daughters, betrayed damsels, and high-minded old barons, even in prose narratives. The accompaniments of blank verse and moral lyrics are not likely to make them

more palatable. Yet there is a great deal of elegant language, and some poetry and pathetic effect in this drama also. The following speech should be good, since the idea is borrowed from Homer, and the cast of the diction from Shakespeare.

‘Hadst thou been true,
 There’s not a charm, a power which earth doth own,
 Should have estrang’d my love: I would have serv’d thee
 In bonds or death with absolute devotion.
 Friends, kindred, brother, father, native place,
 Had been as nothing: thou to me hadst been
 Father, and brother, and dear relative,
 And friend, and native place: I trusted thee
 With an unbounded sway o’er my warm heart:
 There’s not a joy, which the wide world contains,
 But had been plac’d within our easy reach.’ p. 196.

The second volume contains miscellaneous poems; fourteen odes, written in a verbose and heavy style, though not without occasional indications of vigour and genius; and four or five other pieces in the ordinary iambic measure, all of them upon serious subjects.—‘The Dying Penitent’ talks, like other ladies in her unhappy situation, of the innocent pleasures of her childhood, the agitation of her guilty hours, and the horrors of her remorse.—‘The Aboriginal Britons’ is the work with which we have been longest acquainted, and which we are still most disposed to admire. It is more highly coloured, and more closely wrought; the conceptions are bolder, and the expression more nervous than in any of his later productions.—‘The Christian’ is a didactic poem, which professes to deliver, in regular heroic verse, a short view of the evidences upon which our sacred religion is founded. There are some good lines towards the close, describing the awe and veneration which was felt by the Gothic invaders of Italy, when they came suddenly to a monastery where the holy men were chanting their evening prayers.—‘Britannia’ is a kind of war-song in praise of the British navy, and is written with a good deal of spirit.—‘Barnborough Castle,’ which terminates the volume, was written so long ago as the year 1792, and contains some striking images and very harmonious versification. We can only afford the following short extract:

‘At solemn midnight, when the bark shall ride
 With streaming pendant over the peaceful tide;
 When trembling moon-beams play along the brine,
 And stars round all the glowing welkin shine;
 When, silent borne along, the whitening sails
 Swell with the summer’s gently-breathing gales;
 The Pilot, listening to the wave below,
 Which hoarsely breaks against the passing prow,

Shall

Shall thoughtful turn, where dimly to his eyes
 Through the pale night these mellow'd turrets rise;
 And, as he muses on some friend most dear,
 Rais'd by thy mercy from a watery bier,
 Swelling at heart, shall o'er the tranquil wave
 Give thee a sigh, and bless thy hallow'd grave.' p. 191, 192.

Upon the whole, though we do not think Mr Richards a first-rate poet, we are inclined to place him very high among writers of the second order, and are satisfied that he has much more merit than many that make much loftier pretensions.

ART. VIII. *An Inquiry into the Nature and Origin of Public Wealth, and into the Means and Causes of its Increase.* By the Earl of Lauderdale. 8vo. pp. 486. Edinburgh, Constable & Co. London, Longman & Rees.

TWO good consequences have always resulted from men of high rank bestowing their attention upon literary pursuits: an useful example has been set to those whose situation in life gives them abundance of leisure for speculative employment; and that occupation, which is in its own nature the most dignified, has been exalted also in the eyes of the multitude. If any branch of science deserves such patronage, it is surely the study of political economy, both on account of its extensive importance to society, and its peculiar claims upon those who are born to a high interest in state affairs. We are inclined, therefore, to offer Lord Lauderdale our unfeigned thanks for the zeal with which he has devoted his retirement to the cultivation of this great field of inquiry, and to express our conviction, that an example so laudable, will be followed by many persons who are at present lavishing the influence of their rank and fortune upon objects far less worthy of their regard,—upon the affairs of practical policy, for which very few are fitted by nature, or upon the empty trifles of fashionable life, which are equally below their station and their sex. We trust, also, that Lord Lauderdale having begun to deserve well of the scientific world, by his fair and honest endeavours, will be encouraged to persevere, until he shall augment the obligation by more successful exertions. Nor have we any doubt, that, constrained as we now are thus to limit our praises, we shall obtain from his candour such a patient perusal of our remarks, as may at once correct the estimate which he appears to have formed of his present work, and excite him to farther enterprises, which shall secure a tribute of more unqualified approbation. There are errors indeed, as it appears to us, in the present publication, of a tendency so dangerous as to counteract much of the benefit which the noble author's patronage

is calculated to confer upon the science : and this consideration, together with the unquestionable importance of the subject, must plead our excuse for lending the work a greater portion of our attention than its actual merits may seem to justify.

In the volume now before us, Lord Lauderdale professes to discuss the most elementary branches of political economy. The practical inferences which he from time to time states, are introduced rather as illustrations of his general principles, than examples of their actual application to the affairs of nations. The abstract doctrines of national riches ; the distinctions between the kinds of wealth ; the peculiarities in the modes of its distribution ; the variations in its quantity, and in the sources of its production ; in a word, what we may denominate the pure metaphysics of political economy—form the whole subject-matter of the present publication. The system, therefore, of the author, if he shall be found to have produced any thing that can deserve such an appellation, must receive judgment upon the principles applicable to mere speculative theories, and not upon any views of its practical tendency ; the work must be regarded altogether as a piece of abstract reasoning, without any reference to actual policy ; and the novelty of a few paradoxical assertions respecting the peculiar condition of this country, can in nowise be admitted to take it out of this general description.

Lord Lauderdale's pretensions in the outset, are of a nature to excite no inconsiderable degree of expectation. The prefatory advertisement arrogates, with some confidence, the merit of radical discovery : the general principles which are unfolded, the author tells us, ' are not only new, but even repugnant to received opinions ;' insomuch that he has thought it prudent to withhold, for the present, another volume containing the practical application of his doctrines—and to pause here that he may judge of the effect produced on the public by the doctrines which are now revealed. He expects, too, it would appear, to be ' assailed by prejudice ;' and avows his determination, in such a case, to ' defend himself with obstinacy.' The same kind of language is continued through the whole work ; and the repetition of those assertions as to the author's discoveries, seems to be substituted for the fulfilment of the promises they imply. It is very well, no doubt, to announce to us, in the outset, that we shall have the true nature of wealth explained, that we shall be put in possession of the just notion of value, and that we shall be taught the precise means by which nations acquire riches. But when we have perused the whole book, chapter after chapter, in search of these things, and find ourselves exactly where we were at the beginning, it is rather teasing to be reminded, at every pause, that we have received all manner of instruction ; to be told, that the

the truth has now, for the first time, been unfolded; and to be congratulated on our good fortune, with sundry hints at the disadvantages under which the economists, and Dr Smith and others laboured, who did not possess the lights now communicated to ourselves.

In the *Introduction*, Lord Lauderdale delivers some remarks, rather more judicious than original, upon the evils that have arisen from the use of erroneous and theoretical language in political speculations. He illustrates his observations by the example of the mercantile theory, which owed its origin to the vulgar habit of confounding riches and money as synonymous. This leads him to remark, that a still more fatal error has resulted from confounding together the mass of public or national wealth, and the sum total of the riches of the individuals who constitute the community. He then settles (rather preposterously, *in a note*) the nomenclature which he deduces from the distinction here hinted at, and premises that he is to use '*wealth*' as denoting the opulence of the state, and '*riches*' to designate the fortunes of individuals. From these preliminaries, he is led to lay down the plan of the treatise in the following words.

'As a clear understanding of the relation which public wealth and individual riches bear to each other, appears of the highest importance, in securing accuracy in every subject that relates to the science of political economy; the first and second chapters of this Inquiry, are therefore devoted to the consideration of the nature of *value*, the possession of which alone qualifies any thing to form a portion of individual riches;—to an explanation of what public wealth is, and of what constitutes individual riches;—and to an examination of the relation in which they stand to each other.

'The meaning annexed in this work to the phrase Public Wealth being thus explained, the third chapter contains an investigation of the sources of wealth, in which land, labour, and capital, are separately treated of as the sources of wealth;—an opinion which, though it has been announced by some, and hinted at by others, does not seem to have made on any author so strong an impression as to be uniformly adhered to in the course of his reasonings.

'An idea which has generally prevailed, (though it seems in itself a paradox) that wealth may be increased by means by which it is not produced, in particular by parsimony, or deprivation of expenditure, has made it necessary to investigate this subject in the fourth chapter, as a preliminary to an Inquiry into the Means and Causes of the Increase of Wealth; which is the object of the fifth chapter.' p. 9, 10.

It is not our intention to follow the author through the various parts of his Inquiry, exactly according to the arrangement which he has adopted. Without omitting any of his speculations, we shall present all we have to offer, either as the abstract
of

of his views, or as our own remarks upon them, in the following order. In the *first* place, we shall consider his fundamental position concerning the difference between collective and individual wealth, or what he is pleased to call public wealth and private riches; This will comprehend also his observations upon the nature of value. *Secondly*, We shall offer a few strictures on the theories of the economists, and of Dr Smith, respecting the sources of national opulence. This speculation will lead us, in the *third* place, to propose a theory extremely simple and obvious upon this subject, and to examine, by its assistance, the observations which Lord Lauderdale has introduced on the sources of wealth, and the means of its increase. We shall reserve for a separate discussion, his strange opinions concerning the operation of sinking funds.

Under these several heads, it is proposed to exhibit a pretty full analysis of our author's doctrines; and to demonstrate, as concisely as the extensive nature of the inquiry will permit, the fallacies with which the work every where abounds. We mean to state distinctly, that this book, excepting where it refutes some errors of former writers, cannot be considered as an investigation, merely tinctured with doubtful or erroneous theory; but as a collection of positions, all of them either self-evident or obviously false; and founded upon errors which the slightest attention is sufficient to detect. This is our fair and candid opinion; and we can scarcely doubt that it will also be that of every man who reads the work now before us with any reasonable knowledge of the Subject. *

Lord Lauderdale seems first to have been an economist, and afterwards to have discovered some of the errors of that sect;—to have read Smith before he was weaned from the prejudices of Quesnai, and, during that period, to have resolved that no two pages in the *Wealth of Nations* should agree together;—to have found himself embarrassed for want of a theory, and, in this state, to have been dazzled by the first paradox which presented itself to his fancy. The paradox, as is usual, probably appeared, upon examination, less suspicious than at first view; by degrees, he was convinced of its truth, and resolved to make every thing fall before it. Not satisfied with one such passion, he was soon smitten with new objects of the same kind; and his ingenuity always enabling him to discover arguments in support of each successive favourite, he at last adopted the whole train, and has now collected and cemented them together for public edification. We are seriously convinced, that nothing but a hasty, unthinking process, such as this, could have blunted the natural acuteness of our author's powers, and made one who is uniformly so clear.

clear-sighted in detecting the errors of others, obstinately keep his eyes shut upon his own mistakes.

I. Value, according to Lord Lauderdale, is constituted by the concurrence of two circumstances;—one or more qualities useful or delightful to man, and a certain degree of scarcity. Nothing can be deemed valuable intrinsically; nor can any commodity, however excellent in itself, be considered as of value, unless it is also rare. When we measure the value of one commodity by comparing it with another, the result is evidently liable to be affected by eight circumstances, viz. by the variations in quantity and in demand of both these commodities. Thus, if we would express the value of grain in pounds Sterling at different times, our calculation might be affected by a diminution or an increase in the quantity both of money and of grain, and by a similar diminution or increase in the demand for both these commodities. It is not, then, upon the possession of any inherent quality that value depends; but upon the proportion between the demand for, and the supply of the valuable commodity.

In all this, it does not appear to us that there is any novelty, if we except the very obvious circumstance of our author confining his attention exclusively to one kind of value. Former writers had considered value as twofold—value in use, and value in exchange—or what may be termed *absolute* and *relative* value. The one of these qualities depends entirely on the nature of the commodity itself, and is wholly uninfluenced either by its quantity or the demand for it; or by the quantity of, and demand for any other commodities. But the idea of relative or *exchangeable* value, owes its existence altogether to the supposition, that an operation of barter renders it necessary to compare a portion of one commodity with a portion of another; and this comparison must depend on the ratios between the supply of, and the demand for both articles. That the idea of value, however, may exist independently of all commerce, no one can deny, without a total perversion of common language. If, to take Lord Lauderdale's own illustration, the quality of insuring a century of robust health were suddenly communicated to each grain of wheat, can any one doubt the propriety of saying that wheat would instantly become infinitely more valuable? Exchangeable value is evidently a secondary consideration; it depends on the circumstance of some men wanting what others possess; it depends on the unequal distribution of possessions. If every human desire were universally gratified in extreme abundance—if all the commodities which we find necessary or desirable to us, were at once multiplied beyond the utmost wants of the whole species, it is true that all barter would cease; and, consequently, that the
idea

idea of exchangeable, relative, or comparative value would be no more. But would it not be a gross abuse of language, to say, that all value whatever had ceased, and that in this universal abundance nothing valuable remained? Nay, that all commodities existing in an indefinite quantity were equally valuable, because equally abundant? Would not grain, for example, be still more valuable in itself than sand, diamonds, or gold?—It deserves, in passing, to be noticed, that certain commodities derive nearly their whole value, in every sense of the word, from their extreme scarcity. This, added to a trifling portion of beauty, which of itself would have been unable to confer any value, renders them highly valuable, in consequence of the capricious taste of men, and their desire of overcoming difficulties. Were food multiplied to the full extent of the demand which the whole species has for it, and were every other object of desire at the same time equally multiplied, diamonds would cease to be prized, inasmuch as they derive their value from the difficulty of procuring them; but food would continue to be prized, because it would retain its power of supporting life.

The consideration of this solitary case, in which the caprices of men have bestowed a fictitious value on the mere quality of rarity, seems to have misled our author, and to have confirmed him in his omission of one entire branch of the subject which he purposed to describe. The discussion may to some appear trivial and verbal; but we shall soon find that the same radical omission pervades the subsequent part of his speculations, and occasions still more obvious mistakes, of exactly the same description, in the doctrine respecting individual riches.

It follows very clearly from the positions regarding exchangeable or relative value, laid down by Lord Lauderdale, and acknowledged by all who have treated on these matters, that it is in vain to seek for any invariable standard or measure of value. Our author exemplifies this truth by several pertinent remarks, and very successfully refutes the theory of Dr Smith, that labour affords such an unalterable measure, by shewing, from different passages in the *Wealth of Nations*, how much the value of labour varies at different times, in remote places, in different parts of the same country,—and how much more incurable such variations must be in the value of labour, than in the value of other commodities.—This mode of argument, however, we do not think altogether adapted to a general treatise on the principles of the science. It applies with sufficient accuracy to the doctrines of the particular author in question, but might very possibly fail to convince others, who maintain the same opinions with Dr Smith, upon more consistent grounds. In one or two instances,

instances, the refutation, by means of this *argumentum ad hominem*, wears the appearance of captiousness and ill-temper. A passage is quoted from the *Wealth of Nations*, to show that labour *alone*, of all commodities, may vary in its value at the same time, and in the same place; whereas it is very obvious from the slightest attention to this passage, that it will not admit of such limitation. 'Different prices,' Dr Smith observes, 'are often paid at the same place, and for the same sort of labour, not only according to the different abilities of the workmen, but according to the easiness or hardness of the masters.' b. l. c. 8.— a proposition, applicable to all other paymasters, as well as to those who pay for work; and which only proves, that in every market, the *average* price, which the competition of buyers and of sellers regulates, must be taken as the exchangeable value of the commodity.

Lord Lauderdale is also peculiarly severe upon the absurdity of a writer who represents a great portion of human labour as unproductive, erecting labour into a standard of value. This, he observes, is as ridiculous as if a man were to measure dimensions by a mathematical point which has no magnitude. Now, surely, Dr Smith, whatever qualities or effects he might attribute to the labour which he terms unproductive, never intended to describe it as a nonentity; and even if such had been his doctrine, it is obvious we could only have inferred, that the productive kind of labour is, in his opinion, the measure of value.

Upon the whole, we are disposed to think that our author avails himself of certain obscurities, and even inconsistencies in Dr Smith's language, for the purpose of fastening upon him a much more contradictory and erroneous theory than he ever maintained. That a person of Dr Smith's metaphysical and mathematical powers* should have meant to predicate the absolute immutability of any standard, we cannot for a moment imagine. He must have known, that such a proposition would have been as absurd as to ascribe absolute magnitude or entire immutability to the Tower standards. We apprehend that he only sought for an approximation, and thought he had found it in that one commodity which, being by much the most frequently exchanged against all other commodities, and of course the most constantly brought in to comparison with every object of barter, might be assumed as the best attainable measure of their relative value. Lord Lauderdale certainly has not proved the contrary of this proposition to any one who may hold Dr Smith's opinion, without a minute adherence to his manner of enunciating and demonstrating it.

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* See Professor Stewart's *Life of Smith*.

We now come to our author's peculiar theory of public wealth, as contradistinguished from private or individual riches. There cannot, he conceives, be a greater mistake than to confound these two ideas, and to estimate the riches of a community by calculating the aggregate of the private fortunes which belong to all its members. The value of a commodity depending upon its scarcity, the riches of individuals must be in proportion to the scarcity of the commodities which they possess. But the whole wealth of a nation is in proportion to the abundance in which it possesses all commodities useful or delightful to man. Therefore, the nation must be enriched by that very plenty which necessarily diminishes the fortunes of its inhabitants. Thus, a scarcity of grain renders the whole price of the deficient crop much greater than that of an ordinary crop; and a want of water would give a price to every stream and spring in the country. The proprietors of grain and water would thereby be enriched; but the community would evidently be impoverished. This is the whole substance of the argument and its illustration. The inference is a proposition apparently paradoxical, but highly esteemed by Lord Lauderdale, both for its strict accuracy and its important consequences. He thus states his grand discovery.

'From these considerations it seems evident, not only that the sum-total of individual riches cannot be considered as an accurate description or definition of the wealth of a nation; but that, on the contrary, it may be generally affirmed, that an increase of riches, when arising from alterations in the quantity of commodities, is always a proof of an immediate diminution of wealth; and a diminution of riches, is evidence of an immediate increase of wealth: and this proposition will be found invariably true, with the exception of a single case, which will be afterwards explained. Thus, it becomes necessary to adopt a definition of Public Wealth, which conveys a different idea of it from that which has been generally received; and it is therefore submitted, that Wealth may be accurately defined,—to consist of all that man desires, as useful or delightful to him.

'But if National Wealth is truly and rightly defined, to consist of all that man desires as useful and delightful to him; as (from the explanation that has been already given of the nature of value, or of the circumstances that entitle any thing to the character which qualifies it for forming a portion of individual riches) we know, that by adding the circumstance of scarcity to the qualities which make any commodity a component part of public wealth, we should give it value, and thus qualify it to form a portion of individual riches, it follows, that individual riches may be defined,—to consist of all that man desires as useful or delightful to him; which exists in a degree of scarcity.'

Now, we imagine that a very few simple considerations will make the error and confusion of all this reasoning extremely evident even to the author himself.

When

When we estimate the wealth of an individual, we generally state it in money, the common measure of value: We suppose, that his whole effects are to be brought into the market, and sold at the current prices: Those prices are, of course, determined by the proportion between the supply of, and the demand for each commodity: Consequently, our estimate of the individual's fortune is affected by the consideration of *relative* value—by the scarcity in which the articles he possesses are found. That this, however, is by no means the only mode of instituting the calculation, is abundantly clear from what was said above respecting exchangeable and intrinsic value. For, let us suppose that the individual possesses his property so parcelled out, as to command, without any exchange, every object of his desire—let us suppose, farther, that every other individual possesses the same abundance—Should we, in this case, deny that the individual, of whose fortune we have been speaking, is master of any wealth? Or should we be entitled to say, that every person in the community had become absolutely poor, when every person was placed in extreme abundance? It is clear, that the estimate of wealth is only relative, and depends on a comparison which proceeds upon the supposition of some persons wanting what others have to give away. When all are become equally rich, Lord Lauderdale maintains that all wealth, *i. e.* all individual wealth, has vanished. This is such a confusion of ideas, and such a plain abuse of language, as demands our unequivocal reprobation. Now, when we estimate the collective wealth of a nation, it is clear, *ex vi termini*, that the idea of internal exchange is out of the question. In every such exchange, one man receives what another gives away; and the aggregate remains unaltered. We shall afterwards see how internal commerce promotes the increase of national wealth; but, in itself, the mere transference of commodities from hand to hand, or from place to place, cannot enter into the estimate of the collective wealth of the country, *i. e.* the aggregate of its commodities, at any instant of time. Therefore, it is the absolute and intrinsic, not the relative value of those commodities, which we consider; and internal commerce being out of the question, exchangeable value cannot enter into the calculation.

Let us now take Lord Lauderdale's illustration, which will serve equally to expose his mistake. If the quantity of grain is diminished one half, the price is increased tenfold; and the whole value of the lesser quantity is five times greater than the value of the larger quantity. But what do we mean by the price being increased tenfold? What, but that the consumers of grain have now to pay ten times more of their superfluous commodities for it? They lose, therefore, exactly what the former gains; and
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in return they get from him only half of what they formerly received, for a much smaller price. It is obvious that this is a diminution of public wealth: But is it not also exactly in the same degree a diminution of individual riches? No one ever maintained, that, in estimating the riches of a community, we were to consider only the fortunes of a *part* of its individual members. The proposition against which our author has to contend, is, that the wealth of the community is synonymous with the wealth of *all* its members taken together; that is, the wealth of the farmer, whose fortune is augmented by the scarcity, together with the wealth of the consumers, whose fortunes are diminished by the scarcity.

We cannot really conceive any thing more loose than Lord Lauderdale's mode of stating and answering what he terms the 'vulgar opinion.' He has not stated an opinion that any man ever maintained. He has fought with a creature of his own imagination, in order to defend a position clearly untenable, and which he never could have thought of holding, had he not involved it in the most palpable obscurity—a mist which has prevented him from ever getting a clear view of it. But perhaps he will be satisfied at once of his oversight, if we remind him, that he has himself repeatedly, though inadvertently, stated with sufficient precision, the doctrine maintained by his adversaries.

'An increase of the fortune of any member of the society, *if not at the expence of any individual belonging to the same community*, is uniformly deemed an augmentation of national wealth; and a diminution of any man's property, if *not* producing an increase of the riches of some of his fellow-subjects, has been considered as of necessity occasioning a concomitant diminution of national wealth.' p. 7.

And again,

'So much, indeed, is public wealth universally deemed the same thing with the mass of private riches, that there appears no means of increasing the fortune of an individual, *when it is not done directly at the expence of another*, that is not regarded as productive of national opulence.' p. 41.

Now, the condition which is inserted in each of these propositions, forms precisely the foundation of their truth; and it is by omitting the consideration of this condition in all the subsequent parts of his argument, that our author has fallen into his leading mistake; for his whole reasoning on the tendency of those things which increase individual riches, to diminish public wealth, proceeds upon the neglect of the condition stated in the passages now quoted. The increase of individual riches in all his statements, is in fact the gain of one member of the community at another's expence. We are yet to learn how the gain of any individual, when

when not made at another's expence, can be effected without the very same gain to the community. We hold the proposition to be identical, and conceive that the explanation formerly given of value and wealth must render it quite evident,—that the riches of a nation, and the sum of the riches of all its inhabitants, are expressions completely synonymous.

It is not a little singular that the fundamental error of valuing every thing in cash, which gave rise to the mercantile system, should be at the bottom of all Lord Lauderdale's speculations about the distinction of public wealth and individual riches. He has evidently fallen into his mistakes, by considering commodities as worth only their money price, and by entirely forgetting, that when goods are estimated in specie, a comparison or exchange is instituted, which is not at all necessary in order to confer value on the commodities. We call a certain proprietor of grain worth ten thousand pounds, because it is possible that he might want the money, and his grain would enable him to command it. Were commerce at an end, *i. e.* were every one possessed of as much grain as he wanted, and of every other useful or desirable commodity, the proprietor certainly would not be called a man worth ten thousand pounds. Even in the present circumstances, it would be as correct to say he was worth so many quarters of wheat, as so many thousand pounds. The comparison between grain and money is only made with a view to exchange; and in this view, the statement of relation is affected, no doubt, by the quantity of each article; while in the other point of view, such a circumstance has no place. Our author, attending to the view of exchange only, and then confining his attention exclusively to the situation of the seller, has drawn the absurd inference, that the wealth of *all* the individuals in a state is different from the wealth of the state, merely because the wealth of *some* individuals may be affected differently from that of the community. We are inclined to think the prejudice of valuing all things in money one of the most rooted in the minds of men, and of the most extensive influence in political speculations. After all the expositions which it has received, and from no author more distinctly than from Lord Lauderdale, we find him actually founding a theory upon it. He has been led away by the form of expression which substitutes the money price for the value—the money for the money's worth. He has not sufficiently considered that all such modes of speech suppose the comparison applied in commercial transactions; he has entirely forgotten, that in estimating the actual amount of national wealth, when we say the scarcity of an article increases its price or its value in money, we include in this proposition, an assertion that the money, or, what is the same thing, some other

commodities, have lost so much of their value estimated in the article which has become scarce. We are the more disposed to point out the apparent source of Lord Lauderdale's mistakes, from observing that the abuse of ordinary terms have attracted his particular attention. It is somewhat unfortunate, that a theory, founded upon an error in common phraseology, should be prefaced by a formal discourse on the vulgar errors of language.

II. The two leading opinions which divide political enquirers upon the sources of national wealth, are those of the Economists and of Dr Smith. We purpose here to exhibit a concise view of the objections to which both of these doctrines are eminently liable. Such a statement, so far as we know, has never yet been offered to the public; for though Lord Lauderdale has introduced some remarks upon the subject, we are very far from thinking them satisfactory; and are persuaded that none of the adherents of either sect will hold his refutation as sufficient. As the general principle of a distinction between productive and unproductive labour is recognised by Dr Smith,—as we conceive his theory to be extremely inconsistent with itself, and consider it to be an imperfect approximation to that of the Economists, we shall begin with a short examination of the principle on which it depends. That eminent writer divides labourers into two classes; those who, by adding to the value of some raw material, or by assisting in the increase of their quantity, realize or fix in a vendible commodity the effects of their exertions; and those whose labour leaves nothing in existence after the moment of exertion, but perishes in the act of performance. The former he denominates *productive*, the latter *unproductive* labourers; not meaning thereby to undervalue the exertions of many useful kinds of work performed by the unproductive order, but merely asserting that they do not augment the *wealth* of the community. Thus, the work of the farm servant, or manufacturing labourer, is fixed in a useful commodity; the work of a menial servant perishes with the motion of his hands, and adds to the value of nothing. A man grows rich by employing a number of the former; he ruins himself by keeping a multitude of the latter.

To begin with this illustration.—The case of the menial servant must not be compared with that of the labourer employed in farming or manufactures. The menial is employed by the *consumer*, and for his own use exclusively; the farm-servant and journeyman are employed by another party, by whom the consumer is supplied. The former is, properly speaking, in the predicament of a commodity bought or hired for consumption or use; the latter rather resembles a tool bought or hired for working withal. But, at any rate, there is no such difference as Dr Smith supposes

supposes between the effects of maintaining a multitude of these several kinds of workmen. It is the extravagant quantity, not the peculiar quality of the labour thus paid for, that brings on ruin. A man is ruined if he keeps more servants than he can afford or employ, and does not let them out for hire,—exactly as he is ruined by purchasing more food than he can consume, or by employing more workmen in any branch of manufactures than his business requires, or his profits will pay.

But it may be observed, in general, that there is no solid distinction between the effective powers of the two classes whom Dr Smith denominates productive and unproductive labourers. The end of all labour is to augment the wealth of the community; that is to say, the fund from which the members of that community derive their subsistence, their comforts and enjoyments. To confine the definition of wealth to mere subsistence, is absurd. Those who argue thus, admit butcher's meat and manufactured liquors to be subsistence; yet neither of them are necessary; for if all comfort and enjoyment be kept out of view, vegetables and water would suffice for the support of life; and by this mode of reasoning, the epithet of *productive* would be limited to the sort of employment that raises the species of food which each climate and soil is fitted to yield in greatest abundance, with the least labour,—to the culture of maize in some countries; of rice in others; of potatoes, or yams, or the bread-fruit tree in others: and in no country would any *variation* of employment whatever be consistent with the definition. According to this view of the question, therefore, the menial servant, the judge, the soldier and the buffoon, are to be ranked in the same class with the husbandmen and manufacturers of every civilized community. The produce of the labour is, in all these cases, calculated to supply either the necessities, the comforts, or the luxuries of society; and that nation has more real wealth than another, which possesses more of *all* those commodities. If this is not admitted, then we can compare the two countries only in respect of their relative shares of articles indispensably requisite, and produced in greatest abundance, considering the soil and climate of each: and, as nothing which is not necessary is to be reckoned valuable, a nation wallowing in all manner of comforts and enjoyments, is to be deemed no richer than a horse fed upon the smallest portion of the cheapest grain, or roots and water, which is sufficient to support human life.

But it is maintained, that admitting the wealth of a community to be augmented by the labours of those whom Dr Smith denominates unproductive, still they are in a different predicament from the productive class, inasmuch as they do not augment the

exchangeable value of any separate portions of the society's stock—neither increasing the quantity of that stock, nor adding to the value of what formerly existed. To this, however, it may be replied, that it appears of very little consequence whether the wants of the community are supplied directly by men, or mediately by men with the intervention of matter—whether we receive certain benefits and conveniences from those men at once, or only in the form of inanimate and disposable substances. Dr Smith would admit that labour to be productive which realized itself in a stock, though that stock were destined to perish the next instant. If a player or musician, instead of charming our ears, were to produce something which, when applied to our senses, would give us pleasure for a single moment of time, their labour would be called productive, although the produce were to perish in the very act of employment. Wherein, then, lies the difference? Merely in this—that we must consume the one produce at a certain time and place, and may use the other in a latitude somewhat, though but a little, more extensive. This difference, however, disappears altogether, when we reflect that the labour would still be reckoned productive which would give us a tangible equivalent, though it could not be carried from the spot of its production, and could last only a second in our hands upon that spot.

The musician, in reality, affects our senses by modulating the air, *i. e.* he works upon the air, and renders a certain portion of it worth more than it was before he manufactured it. He communicates this value to it only for a moment, and in one place; there and then we are obliged to consume it. A glass-blower, again, prepares some metal for our amusement or instruction, and blows it up to a great volume. He has now fixed his labour in a tangible commodity. He then exchanges it, or gives it to us, that we may immediately use it, *i. e.* blow it until it flies to shivers. He has fixed his labour, however, we say, in a vendible commodity. But we may desire his farther assistance—we may require him to use it for our benefit; and, without any pause in his process of blowing, he bursts it. This case approaches as nearly as possible to that of the musician; yet Dr Smith maintains that the latter is a different kind of labour from the former. Nay, according to him, the labour of the glass-blower is productive, if he spoils the process, and defeats the end of the experiment, by pausing, and giving into unskilful hands the bubble before it bursts. But if he performs the whole of that instructive operation, by contemplating which Sir Isaac Newton was taught the nature of colour, his labour must be denominated unproductive!

But

But it is not fair to deny that the class called unproductive fixes its labour in some existing commodity. First, we may observe that no labour, not even that of the farmer, can lay claim to the quality of actually *adding* to the stock already in existence: Man never creates; he only modifies the mass of matter previously in his possession. But, next, the class alluded to does actually, like the class termed productive, realize its labour in an additional value conferred upon the stock formerly existing. The only difference is, that instead of working upon detached portions, this class operates upon the stock of the community in general. Thus, the soldier renders every portion of that stock more valuable by securing the whole from plunder; and the judge, by securing the whole from injury. Dr Smith would allow that man to be a productive labourer who should manufacture bolts and bars for the defence of property. Is not he also, then, a productive labourer, who protects property in the mass, and adds to every portion of it the quality of being secure? In like manner, those who increase the enjoyments of society, add a value to the stock previously existing; they furnish new equivalents for which it may be exchanged; they render the stock worth more, *i. e.* exchangeable for more—capable of commanding more enjoyments than it formerly could command. The stock of the community is either that part which is consumed by the producer, or that part which he exchanges for some object of desire. Were there nothing for which to exchange the latter portion, it would soon cease to be produced. Hence, the labour that augments the sum of the enjoyments and objects of desire for which this portion may be exchanged, is indirectly beneficial to production. But if this portion destined to be exchanged, is already in existence, the labour which is supported by it, and which returns an equivalent to the former owner, by the new enjoyments that it yields him, must be allowed to add a value directly to the exchangeable part of the stock.

In every point of view, therefore, it appears that the opinion of Dr Smith is untenable. He has drawn his line of distinction between productive and unproductive labour in two low a part of the scale. The labour which he denominates unproductive, has the very same qualities with a great part of the labour which he allows to be productive. According to his own principles, the line should have been drawn, so as to cut off, on the one hand, the labour which apparently increases the quantity of stock, and to leave, on the other hand, all that labour which only modifies, or in some manner induces a beneficial change upon stock already in existence. In a word, his principles clearly carry him to the theory of the Economists; and, in order to be

consistent, he ought unquestionably to have reckoned agriculture the *only* productive employment of capital or labour. That there is only this one doctrine tenable, in consistency with itself, has been, we conceive, sufficiently proved. We shall now consider whether there is in reality any foundation even for this distinction, which forms the basis of the theory supported by the Economists.

Whoever has honoured the foregoing observations with his attention, will speedily be satisfied that the reasonings applied to Dr Smith's classification of labour are applicable also to the more precise and consistent doctrine of the followers of Quesnai. It is the opinion of these ingenious metaphysicians, that the labour bestowed upon the earth can alone be considered as really productive; that all other labour only varies the position or the form of capital, but that agriculture increases its net amount. That the merchant who transports goods from the spot of their abundance to the quarter where they are wanted, adds nothing to the whole stock, or to the value of the portions which he circulates, these reasoners deem almost a self-evident proposition. That the manufacturer who fashions raw materials into useful commodities increases their value, the Economists indeed admit, but they deny that any farther addition is thus made to the value of the materials than the value of the workman's maintenance while employed in the manufacture.

It seems obvious, at first sight, to remark, that, according to their own principles, these theorists have committed one error. They have ranged all labour, except that of the husbandman, in the same class; while they have virtually acknowledged that as great a difference subsists between the two members of that division, as between either of them and the other division. For surely, the merchant who adds, according to them, no value to any material, is as much to be distinguished from the manufacturer who does add the value of his maintenance to the raw produce, as the manufacturer is to be distinguished from the husbandman, whose labour returns a net profit over and above the price of his maintenance. This criticism is almost decisive, in a discussion which, it must be admitted on all hands, resolves into a question of classification. But the error of the Economists is still more fundamental.

There is no essential difference between the powers of man over matter, in agriculture, and in other employments. It is a vulgar error, to suppose that, in the operations of husbandry, any portion is added to the stock of matter formerly in existence. The farmer works up the raw material, *i. e.* the manure, soil and seed, into grain, by means of heat, moisture, and the vegetative

tative powers of nature, in whatever these may consist. The manufacturer works up his raw material by means of certain other powers of nature. Dr Smith, however, who states the doctrine of the Economists in its greatest latitude, (Chap. V. Book II. Vol. II. p. 52. 8vo edition), asserts, that in agriculture nature works with man, and that the rent is the wages of her labour; but that, in manufactures, man does every thing. But does not nature work with man, in manufacture as well as in agriculture? If she works with him in forming a handful of seed into a sheaf of flax, does she not also work with him in fashioning this useless sheaf into a garment? Why draw a line between the two effects, when a person can no more clothe himself with an unwrought sheaf of the produce than with an unsown handful of the seed? Why draw a line between the two operations, when the workman can no more change the sheaf into a garment without the aid of those powers which we denominate nature, cohesion, divisibility, heat and mixture, than the farmer can convert the seed into a sheaf without the vegetative powers of heat, mixture and cohesion? If, instead of flax, we suppose the sheaf to be of barley, the analogy still will be more apparent. The brewer or distiller is certainly a productive labourer; yet the changes which he effects are as little the direct work of his hands, as the multiplication of the seed in the field. The conversion of that substance into an intoxicating beverage is the work of nature, as well as its growth in the harvest; and fermentation is as great a mystery as vegetation. If the rent of land, again, may be called the wages of nature, in agricultural operations, the net profits of manufacturing stock may be termed her wages in our operations upon raw produce; meaning by net profits that part of the gross profit which remains after paying the labourer who works, and him who superintends; that is, after deducting wages; and the profit received by a man trading on borrowed capital: for we must always keep in view a consideration, the omission of which, we will venture to assert, has misled almost all political inquirers, that the rent of land is, properly speaking, the net profit of stock advanced by the landlord, and that every thing which the farmer receives over and above the wages of his labour, is the profit of another stock, which may be borrowed as well as the land; and in this case his whole profit resolves into wages—the case of a trader having no capital whatever. In both cases, there is a clear gain; in both it is obtained in the same way; in both distributed among the same classes.

Let us, however, take an example or two, for the purpose of

comparing more closely the productive with the unproductive kinds of labour. The person who makes a plough is, according to the Economists, an unproductive labourer, but he who drives it is a productive labourer. In what predicament, then, is the labourer who makes a hedge round a field for its protection, or a ditch for draining it? This operation, because it is called farm-work, is admitted by the Economists to be productive. But wherein does it differ from the plough manufacture? Both are alike subservient and necessary to the operations of ploughing and reaping; both are alike performed by persons who do not raise the produce that feeds them; and both are alike performed upon some materials produced from the earth by other labour. If the plough were made in a bungling manner by farm-servants in the out-houses of the farm, we imagine the manufacture would of necessity fall under the head of productive labour, as well as the work of hedging and ditching. Again—Capital employed by the corn-merchant in collecting and circulating grain, is most unproductively employed according to the Economists. But the capital employed in collecting seed in a barn, carrying it from thence to the field, and returning the crop at harvest, is employed in the most productive manner possible. Can it be maintained that there is any difference whatever between these two cases, necessarily placed by the theory of the Economists at the opposite extremes of their scale? If the corn-merchant lived on the ground of the farmer, and if the farmer, from this convenient circumstance, were enabled to sell all his grain without having any barns or granaries, certain of supplying himself at his own door next seed-time, the Economists would be forced to allow that the capital of the corn-merchant, in so far as it assisted the farmer, was productively employed.—Wherein lies the difference?—And these observations are applicable to every case of every manufacture, and every species of commerce whatever. They apply to those kinds of employment which are subservient to the purposes of comfort and enjoyment, as well as to those which administer to our necessary wants; for we showed, above, that there is no possibility of drawing a line between the cases, consistently with principles admitted even by the Economists themselves. The foundation of all these misapprehensions is evidently laid in a neglect of the great principle of the division of labour. In whatever part of a community the labour connected with agriculture, immediately or remotely, is performed, the subdivision of the task renders it more productive than if it were carried on upon the farm itself: and to deny the same properties to this labour, on account

count of its subdivision and accumulation in different quarters, is little less than a contradiction in terms.

There is only one view of the economical theory which remains to be taken; it is that most ingenious argument by which the followers of Quesnai attempt to prove that manufacturing labour only adds a value equal to its own maintenance. The above remarks may indeed suffice for the refutation of this doctrine; but its peculiar demonstration merits separate attention.* The works of the artizan, the Economists maintain, are in a very different predicament from the produce of the agricultural labourer. Multiply the former beyond a certain extent, and either a part will remain unsold, or the whole will sell at a reduced price. Multiply the latter to any extent, and still the same demand will exist, from the increased number of consumers whom it will maintain. The labour of the artizan is therefore limited to a particular quantity; this quantity it will always nearly equal, but never exceed; and the amount is determined by the competition of different artists on the one hand, and the fixed extent of the demand on the other. The labour of the husbandman has no such limits. The extension of his productions necessarily widens his market. The price of manufactures will therefore be reduced to the value of the raw material, of the workman's maintenance, and of his master's maintenance; while that of agricultural produce, having no such limit, leaves always a net profit over and above the farmer's maintenance.

In answer to this very subtle argument, we may remark, that it proceeds on a total misconception of the principal of population. It is absurd to suppose that the mere augmentation of agricultural produce extends the demand for it, by increasing the population of the community. If the lowest means only of subsistence are considered, and if men will be contented to possess only the simplest food, without any raiment, then, no doubt, an increase of grain and roots may increase the numbers of the consumers. But is it not evident that men require more than the mere necessities of life, and that even those necessities are in part the production of manufacturing labour? Does not a person, in forming his estimate of a competency, take into the account articles of manufacture as well as husbandry and furniture, clothes and luxuries, gratifications as well as meat and drink? The mere augmentation of those simple necessities will never sensibly increase the number of the consumers, any more than the

* See this reasoning stated repeatedly in *Dialogue 2de, Physiocratie*, p. 571.

the mere augmentation of articles of comfort and luxury. An increase in the production of the one class of commodities will operate exactly as powerfully on population, as an increase in the production of the other class. In fact, an increase of either may somewhat affect the numbers of the consumers; but in order to produce any considerable augmentation of those numbers, the increase of both species of produce must go on together. This argument, then, only leads us by a new, and certainly an unexpected road, to a novel conclusion in favour of the theory that utterly denies any distinction between any of the applications of capital and industry, which are subservient to the wants and enjoyments of man.

III. The reasonings in which we have been engaged, will probably be deemed sufficient to authorise several positive inferences with respect to the nature and sources of national wealth. We trust that enough has been said to expose the inaccuracy of drawing any line between the different channels in which capital and labour may be employed—of separating, with Dr Smith and his followers, the operations of agriculture, manufactures, and commerce, from those arts where nothing tangible is produced or exchanged—or of placing, with the Economists, the division somewhat higher, and limiting the denomination of *productive* to agricultural employment alone. It may safely be concluded, that all those occupations which tend to supply the necessary wants, or to multiply the comforts and pleasures of human life are equally productive in the strict sense of the word, and tend to augment the mass of human riches, meaning by riches all those things which are necessary, or convenient, or delightful to man. The progress of society has been attended with a complete separation of employments originally united. At first, every man provided for his necessities as well as his pleasures, and for *all* his wants as well as *all* his enjoyments. By degrees, a division of these cares was introduced; the subsistence of the community became the province of one class, its comforts of another, and its gratifications of a third. The different operations subservient to the attainment of each of these objects, were then entrusted to different hands; and the universal establishment of barter, connected the whole of these divisions and subdivisions together; enabled one man to manufacture for all, without danger of starving by not ploughing or hunting—and another to plough or hunt for all, without the risk of wanting tools and clothes by not manufacturing. It has thus become as impossible to say exactly who feeds, clothes, and entertains the community, as it would be impossible to say which of the many workmen employed in the manufacture of pins is the

the actual pin-maker, or which of the farm-servants produces the crop. All the branches of useful industry work together to the common end, as all the parts of each branch cooperate to its particular object. If you say that the farmer feeds the community, and produces all the raw materials which the other classes work upon; we answer, that unless those other classes worked upon the raw materials, and supplied the farmer's necessities, he would be forced to allot part of his labour to this employment, whilst he forced others to assist in raising the rude produce. In such a complicated system, it is clear that all labour has the same effect, and equally increases the whole mass of wealth. Nor can any attempt be more vain than theirs, who would define the particular parts of the machine that produce the motion, which is necessarily the result of the whole powers combined, and depends on each one of the mutually connected members. Yet so wedded have those theorists been to the notion, that certain necessary kinds of employment are absolutely unproductive, that a writer of no less name than Dr Smith has not scrupled to rank the capital sunk in the public debt, or spent in warfare, in the same class with the property consumed by fire and the labour destroyed by pestilence. He ought surely to have reflected, that the debts of a country are always contracted, and its wars entered into, for some purpose either of security or aggrandisement; and that stock thus employed must have produced an equivalent, which cannot be asserted of property or population absolutely destroyed. This equivalent may have been greater or less; that is, the money spent for useful purposes may have been applied with more or less prudence and frugality. Those purposes, too, may have been more or less useful; and a certain degree of waste and extravagance always attends the operations of funding and of war. But this must only be looked upon as an addition to the necessary price at which the benefits in view must be bought. The food of a country, in like manner, may be used with different degrees of economy; and the necessity of eating may be supplied at more or less cost. So long as the love of war is a necessary evil in human nature, it is absurd to denominate the expences unproductive that are incurred by defending a country, or, which is the same thing, preventing an invasion, by a judicious attack of an enemy, or, which is also the same thing, avoiding the necessity of war by a prudent system of foreign policy. And he who holds the labour of soldiers, and sailors, and diplomatic agents to be unproductive, commits precisely the same error as he who should maintain the labour of the hedger unproductive, because he only protects, and does not rear the crop. All those kinds of labour and employments of
stock,

stock, are parts of the system, and all are *equally* productive of wealth*.

The speculations in which we have been indulging, appear, in some points, to have partially received Lord Lauderdale's assent. His work contains a statement of several of the propositions which we have ventured to maintain; and, in particular, he argues against the doctrines maintained by the author of the *Wealth of Nations*, on grounds similar to those which we have detailed. But although several of his positions are enforced with considerable ingenuity and acuteness, and though, generally speaking, we have to acknowledge a great degree of liberality in his economical tenets; yet his deductions appeared to us so deficient in connection, and in many points so narrow, and so little calculated to exhibit the subject with the full effect of which it is capable, that we have thought ourselves justified in submitting to our readers the foregoing analysis of our opinions upon this important field of inquiry, trusting that such a view of theories, never before fairly canvassed, may prove not unacceptable to the student of political economy. We shall now, with greater brevity, run over a few of the topics connected with this branch of the subject, in which the noble author appears to have committed some fundamental errors, from his rash method of inquiring, and his unphilosophical ardour for novelty and paradox.

Lord Lauderdale maintains, and we really think with more parade

* See Book II. Chap. iii. *Wealth of Nations*, (Vol. II. p. 25. 8vo edition.) The terms *productive* and *unproductive* are, in the argument of some of the Economists, and in parts of Dr Smith's reasonings, so qualified, as to render the question a dispute about words, or at most about arrangement. But this is not the case in many branches of both those theories, and especially in the position examined in the text. The author actually remarks how much richer England would now be, had she not waged such and such wars. So might we estimate how many more coats we should have, had we always gone naked. The remarks here stated, may with equal justice be applied to a circumstance in the *Theory of the Balance of Trade*. In stating the proportion of exports to imports, it has justly been observed, that no notice can ever be taken, in Custom-house accounts, of money remitted for subsidies, or for the payment of our troops and fleets abroad. But it has very inaccurately been added, that these sums are so much actually sent out of the country without an equivalent. In fact, the equivalent is great and obvious, although of a nature which cannot be stated in figures among the imports. The equivalent is all the success gained by our foreign warfare and foreign policy—the aggrandisement and security of the state, and the power of carrying on that commerce, without which there would be neither exports nor imports to calculate and compare.

parade than is warranted by any novelty the proposition can be thought to possess, that the sources of wealth are threefold—*land, labour, and capital*. He accuses all preceding writers of inconsistency and confusion in ascertaining those sources, and is peculiarly severe upon Dr Smith, whose doctrines are so lamentably incongruous, that, it seems, ‘no opinion has any where been maintained on this subject, which does not appear to have been adopted in different parts of the Inquiry into the Wealth of Nations.’ (p. 116.) A little farther attention to the inestimable work of that profound and deliberate reasoner, and a more careful examination of that very vague and arbitrary position, by which, as by an infallible test, he presumes to try the very father of this science, would probably have taught the Earl of Lauderdale to doubt, whether the inconsistency lay in the substance, or in the language only of Dr Smith’s statements, and whether the mistake was to be charged upon the doctrines of that illustrious author, or upon the standard which has now been invented for their admeasurement.

It is obvious to remark, that no eminent degree of praise is due to a division which, for the sake of extreme accuracy, constitutes ‘*capital*’ a branch or a source of wealth, as separate from land, without giving any definition of what the term *capital* means. By capital, when used generally, we understand the whole of the material world which man can appropriate, as well as those talents, natural or acquired, which are the springs of his exertions. In this sense of the word, it signifies all property material and mental, or every thing valuable to man.* Among other things, it clearly comprehends land. But sometimes we speak of capital in opposition to land; and, in this case, it comprehends every thing valuable, except the ground;† for it certainly includes all the parts and productions of the soil which are severed from it. In this sense, the division nearly resembles the legal distribution of property into real and personal. Both these definitions of capital are used repeatedly, and with equal frequency, by every writer on political economy. A metaphysical discussion of the subject might, without much impropriety, have contained some inquiry into the relative propriety of those arrangements; and we think a very little attention might have shewn that the least correct, is that which is adopted by our author.

If capital is contradistinguished from land, the separation is made by a most indefinite and obscure boundary. Canals, roads, and bridges, are as much a part of capital, as any portable machines, fashioned out of the produce or parts of the soil. The same may be said of fences, drains, footways, and in general of all the ostensible monuments of labour in an improved farm. But is not the soil itself, also, referable to the very same class,
after

after it has been worked up with manure and composts, so as to be highly fertilized? Is not the whole surface of an improved farm, therefore, to be considered as capital, rather than as land? And when a person buys a hundred acres of improved land, how can he say what part of the price is paid for land, and what part for capital? We speak indeed of capital vested in land, and use the phrase, until we actually think there is such a thing as adding the capital to land; whereas, the whole meaning of the expression is, that capital of one kind or other is given in exchange for land, or that our property has become land, instead of some other valuable commodity—or, according to what has just now been defined, that one kind of capital has been exchanged for another. If it is said, that capital is that in which labour has been fixed and realized, either by accumulation or by change of form; then, it is very obvious, that land, in the most extensive sense of the word, must become capital in order to be useful; and that many things, usually reckoned capital, as the wild produce which is raised by nature without human assistance, belongs to the class of land, and not to that of stock. But a difference is established by some, especially by Dr Smith, between capital and the other parts of stock; capital being, according to them, that part which brings in a revenue. This idea clearly appears, by the whole of the illustrations given of it, to have arisen from the fundamental error of considering nothing as productive, which does not yield a tangible return, and of confounding use with exchange. For, may not a man live upon his stock, that is, enjoy his capital, without either diminishing or exchanging any part of it? In what does the value, and the real nature of stock reserved for immediate consumption, differ from stock that yields what Dr Smith calls a revenue or profit? Merely in this—that the former is wanted and used itself by the owner; the latter is not wanted by him, and therefore is exchanged for something which he does want. There is surely no other meaning in the idea of profit or revenue, but this: and as the profit of that part of stock which is exchanged, and which the adherents of this opinion denominate capital, consists merely in the use of those things obtained in return—so, the profit of the other part of stock, the portion reserved for consumption, is the use to which it is immediately subservient. According to Dr Smith, there is some difference between revenue and enjoyment; and that part of a man's property yields him no profit, which is most useful and necessary to him, by which he can support and enjoy life without the necessity of any operation of barter.

But in no particular is the confusion of our ideas on these subjects

jects more remarkable, than in our mode of conceiving the subserviency of different objects to the production of wealth. Lord Lauderdale seems to think that he has settled this point with unprecedented accuracy, by stating, with great prolixity and repetition, that land, labour, and capital, are the three sources of wealth; and yet through his whole Inquiry he has never taken the trouble to draw a line between the various meanings in which he is obliged to use the term 'source;' for he is perpetually confounding the fountain with the stream—the origin with the produce—the cause of wealth with the wealth itself. It is obvious that *land* is a component part of wealth, as well as a means of producing it. The use of a lawn, or station for building, is as much the enjoyment of land itself in the shape of wealth, as the use of its produce for food or clothing is the enjoyment of wealth derived from land.

To call *capital* a source of wealth is still more inaccurate. Capital is nothing but accumulated stock; and all the parts of stock are much more frequently to be considered as wealth—something from which enjoyment is immediately derived, than the mere instruments by which wealth or enjoyment may be procured. To class the fruits of the earth with the land itself—the fish with the water—and the consumeable produce with the thing which produces it, is evidently no very signal proof of accuracy in an author who has taken so much pains to instruct the world 'in the true nature of value, and the difference between wealth and riches.'

Labour, on the other hand, is so far different in the mode of its subserviency to our enjoyments, that it can in no way be ranked in the same class, either with capital or with land. Labour is applicable to both land and capital. It is the means of rendering them useful, or of increasing their utility. It is truly the origin and source of wealth; but is, in no sense of the word, wealth itself—unless, indeed, we conceive the pleasure of some kinds of exertion to be a use of labour analogous to the enjoyment of riches. Nothing, then, can be less close and considerate than the manner in which Lord Lauderdale settles the question relative to the origin and nature of wealth. The subject, indeed, does not admit of any such formal distinction. Wealth may be said to be every thing from which man immediately derives the supply of his wants and desires. Its component parts are as various as those wants and desires, though it is, no doubt, susceptible of various general divisions, liable to no just exceptions in point of accuracy. Thus, it may be ranged in the two classes of matter and mind, or property and talents; and property may be divided into animate and inanimate, or the lifeless and the living

ing things over which man has dominion. By a combination of those component parts of wealth—by the operation of talents on property, and by a combination of the component parts of property—by the operation of living powers upon inert matter, man is enabled to increase the whole of his possessions, and to augment the sum of his enjoyments. In by far the greatest number of instances, some exertion of labour is necessary to profit by his possessions; but this is not universally the case, unless we go so far as to term that exertion labour, which consists in the very act of enjoyment, or of use; for it would scarcely be correct, to consider the eating of wild fruits on the tree as the labour paid for the acquisition of them; it is rather the enjoyment of them—and has nothing in it analagous to the previous exertion required to procure similar fruits by culture, and which must be followed by the same exertion in using them.

The foregoing observations will enable us, with sufficient accuracy, to appreciate the merit of Lord Lauderdale's theory respecting the use of capital—the part of his writings which, at first sight appears most imposing. The capital accumulated in every community, our author maintains, is useful to the members of that community, and profitable to its owners, only in one or both of the two following ways—either by supplanting a portion of labour otherwise necessary, or by performing something which no human labour could effect. In order to demonstrate this proposition, we are carried through the five different modes of employing capital—in *machinery*, which evidently abridges the quantity, and extends the powers of labour—in the *home trade* and manufactures, which save consumers the labour of purchasing at the place of production, and of commissioning each article that they may wish to have made—in the *foreign trade*, which create a saving of the same description—in *agriculture*, which has the same effect as machinery, and which, from our author's own showing, ought to have been ranged under the first head—and, lastly, in *circulation*, which obviously has the same effects with commerce, and should have been ranked under the second head, as being only one branch of trade.

We have here stated what appears to be the *correct* meaning of the author; for he uses a language on this part of his subject, which would lead us to infer, that there is a difference between capital and the objects in which it is said to be vested or employed. It is obvious, that nothing more is meant by capital employed in machinery, than that capital consists in the machinery and in the other property given in exchange for it; and so of the other cases. The benefits, then, attributed to the use of capital, consist merely in the advantages derived from the society
having

having *accumulated* a certain portion of stock of various kinds. Lord Lauderdale, constantly mixing the idea of exchange in all his positions, speaks of capital as if it consisted in the price paid for all the objects which he enumerates.

Now, it appears to us, that if the second use of capital stated by our author (*viz.* the enabling man to perform what his labour could not accomplish) means, its power of supplying all those wants which labour without property could never satisfy, the proposition, that capital either supplants labour, or supplies what labour cannot give, is exactly an identical proposition. For, surely, it did not require an elaborate discourse on ‘the nature of value and the use of capital,’ to convince us, that the use of a knife is to save the waste of our teeth and nails; and that if we had no food, the labour of our teeth and nails, assisted by a knife, would never have prevented us from starving. What more do we learn from this theory, than that the possession of matter saves man trouble, and supplies wants which no pains of his could, without the aid of matter, have gratified?

But the part of Lord Lauderdale’s proposition which appears most ingenious and original, is his explanation of the manner in which the accumulation of stock is beneficial, by abridging the labour of the community. Yet even in this speculation we are convinced there is no solidity. That the stock vested in machinery, or, in other words, machinery itself, is useful by abridging labour, we cannot conceive to be a proposition either disputable or novel. Our author, indeed, says that Dr Smith ‘did not perceive the use of machinery in supplanting labour,’ and he accuses that celebrated writer of ‘a strange confusion of ideas,’ for ascribing to machinery the quality of increasing the productive powers of labour; as if (says Lord Lauderdale) we should term the effect of a short road, that of increasing the velocity of the walker (p. 185). But is not all this a dispute about words? For what does it signify whether we say that a cotton mill saves the labour of ninety-nine workmen in a hundred, or that it renders the labour of the hundredth workman as productive as the labour of the whole hundred formerly was? Is it not quite accurate to say, that a contrivance which gives one man the power of a hundred, increases a hundred fold the power of his labour? Until a machine can be invented by which work can be done without *any* human assistance, the form of expression adopted by Dr Smith will remain the more correct of the two. Besides, according to Lord Lauderdale’s own theory, machines are used for purposes which no labour could accomplish. If a coining machine performs a task to which all the exertions of human

hands are incompetent; and if an improved farm, denominated by our author and Dr Smith a machine, raises not only more grain than the ground naturally produces, but raises grain which, without this invention, could not be produced in the smallest quantity, surely it is most accurate to describe the use of such machinery, by saying that it increases the productive powers of labour; and a 'strange confusion of ideas' might have been more happily exemplified by referring to the work before us, than to the Inquiry into the Wealth of Nations.

But the remaining part of Lord Lauderdale's theory—his assertion, that the capital employed in commerce supplants a labour otherwise unavoidable, appears to have proceeded from an oversight of a different nature, and to have been indebted for all its novelty to a mistake of the remote for the proximate cause.—The accumulation of capital is necessary to that division of labour by which its productive powers are increased, and its total amount diminished. In the progress of society, these circumstances necessarily take place in this order and connexion: A certain quantity of stock must be accumulated, in order that different tasks may be performed by different classes of persons; and this subdivision of employments, not only saves labour in the workmen, by rendering each artist more expert, but saves labour in the consumer, by making one exertion serve the purposes of many persons. All Lord Lauderdale's explanation of the manner in which mercantile and manufacturing capital supplants the labour of the purchaser, resolves itself into this doctrine of the division of employments. The accumulation of stock enables one class of men to work in any line cheaper for the rest of the community, than if each class worked in every line for itself. The immediate saving of labour is here occasioned by its subdivision. It is a consequence of the same accumulation of stock, that one class of men collects the articles necessary for the others all at once, and thus saves each the necessity of collecting for itself, which would be a repetition of the same toil for every transaction. This saving, too, is occasioned by the division of labour; and all writers have agreed in giving the same account of the connexion between the division of labour and the accumulation of stock. Lord Lauderdale's discovery consists in dropping the intermediate link of the chain, and ascribing the effect directly to what the schoolmen used to call the *causa causa*;—it is exactly as if a philosopher were to assert, that it was the heat of summer which fattened our sheep and cattle, while the vulgar continued to ascribe this effect to the abundance of the herbage which that heat might have co-operated to produce.

IV. We now come to the last division, under which it was proposed

proposed to discuss the justness and importance of Lord Lauderdale's discoveries in political economy—his theory with respect to the increase of national wealth. He reserves for the last place, the consideration of the means by which wealth is augmented, and the circumstances that regulate its increase—beginning with an inquiry into the possibility of increasing wealth by any way different from the mode of its production. We shall briefly consider the former of these topics, before we come to the latter, which is by much the most paradoxical.

The only means of increasing wealth are, according to Lord Lauderdale, agricultural and manufacturing industry ; and the latter produces this effect in a degree altogether inferior to the former. It is evident that our author here omits the effectual augmentation of wealth, caused by that division of industry and capital which is subservient to the collection and distribution of the commodities produced by the labour of the agricultural and manufacturing classes. That this also deserves a place in his enumeration, must be apparent to every one who reflects on the reasons urged above, to prove the impossibility of apportioning to each occupation its peculiar share in the production of wealth, and the absurdity of drawing a line between operations precisely similar in their nature, as well as in their effects. The same thing seems also demonstrated by those parts of Lord Lauderdale's own speculations, in which he describes the use of mercantile and circulating capital, and resolves it into a saving of labour. But our objections to the remaining part of this discussion are more fundamental. We find him arguing against Dr Smith and all other economical inquirers, that it is not the division of labour, but the power of supplanting labour by machinery and capital, to which man owes his superiority over the lower animals, and which forms the mainspring of his increasing wealth. The division of labour he views as useful rather in refining and improving the more exquisite species of commodities, than in augmenting our wealth. The use of machinery and capital alone is, according to him, the real, solid means of enriching the world.

Now, with respect to the use of capital in supplanting labour, we have already shown that capital only saves labour, by enabling man to subdivide it, unless where it is directly vested in machinery. The question is therefore reduced to a comparison between the effects of subdivision of labour and machinery ; and in this point of view the discussion is evidently, as our author would state it, extremely absurd. For no one ever was thoughtless enough to argue, that any labour, or any division of occupations, could enable man to make a considerable progress in im-

proving his condition without the assistance of those material instruments which constitute machinery. The idea of defining man a *tool-making* animal, is at least as old as the earlier days of Dr Franklin. And that the perfection of tools is entirely owing to the manufacture of such implements becoming the peculiar care of a class different from that which uses them, and to the still greater refinement of confining different subordinate classes to the manufacture of the various parts of each tool, is a truth, of which no man ever showed himself ignorant or careless, except the author of the work now before us.

It deserves farther to be considered, that the utmost perfection of the tool-making art, the contrivance of new combinations of tools whereby the power of labour is augmented, can only be ascribed to that uttermost refinement in the division of labour, which forms a peculiar class of such men as Smeaton, and Bolton, and Watt, and Arkwright. The use and invention of machinery present, in fact, the most remarkable examples of the advantages derived from a division of labour. To contrast the benefits received from this division with those produced by the use of machinery, is as absurd as to compare the effects of two circumstances intimately and necessarily connected; the one, in fact, the immediate result of the other, and both inseparably joined together in all their operations. It is like quibbling and disputing whether fire or gunpowder produce the greatest augmentation in the aggregate of killed and wounded.

But the most remarkable branch of Lord Lauderdale's speculations on the increase of wealth, is that in which he denies the possibility of augmenting national opulence by any other than the means of its production. He modifies this position, however, in a very material degree, when he comes to his demonstration. At first, we are led to suppose that he means roundly to deny the reality of the difference which accumulation makes upon the sum-total of wealth; and indeed all his general assertions, especially his invectives against those who prefer the conduct of the thrifty to that of the prodigal, warrant the idea of accumulation being, in our author's opinion, injurious to society. Afterwards, however, when he comes to argue the matter more methodically, we find that his reasons apply merely to the *excess* of accumulation; and the only inference to which they lead is, that capital may be heaped up, by parsimony, so as to exceed the amount which can be profitably employed. This he proves by a variety of illustrations, in our opinion quite superfluous. He quotes, for example, the common saying of farmers, 'as much has been done for that field as possible;' (p. 229). He shows, at great length,

length, that the production of any valuable commodity suits itself to the effectual demand for it; and accuses Dr Smith of 'unaccountable inconsistencies' (p. 221.) for admitting this position, and at the same time defending the plan of accumulation. But, what is rather more than superfluous in our author, and what savours strongly of this very inconsistency in one who denies the general benefits of accumulation, he accuses Mr Hume of inattention to the powers of human invention in contriving means of supplanting labour, because that excellent writer states a part of the argument against unlimited accumulation, *vis.* 'the necessary checks which wealth provides to its farther increase.' (p. 298.) It is abundantly clear, that the very power here brought up in answer to Mr Hume, is one of the reasons for believing in the effects of accumulated wealth. It is because new capital, *i. e.* stock not consumed but saved, gives employment to new men, and sustenance to increased numbers of inhabitants, and because it exercises the inventive powers of its possessors, that its accumulation may fairly be said to have no definable bounds. That all expenditure is to be condemned as ruinous beyond what is absolutely necessary for sustaining life, is a doctrine never maintained by any reasoner worth refuting; it is a doctrine uniformly discountenanced by the tenor of the preceding pages. Neither did any one ever think that capital could in no situation be heaped up to excess; on the contrary, the history of several countries has distinctly proved the possibility of such an event.

If the state is thoroughly peopled and cultivated; if its extent is so small as to leave no room for great agricultural or manufacturing improvements; if its foreign commerce has attained the greatest height which the parsimony of its inhabitants enables it to attain by a diminution of profits; if nothing but the acquisition of new territories, a recourse to the colonial system, or an emigration of its capital and people, can save the wealth of the country from being at a stand; any farther accumulation of stock by parsimony must then be unnecessary, as no new channels of employment can be opened. Holland has long nearly reached this point; and England seems tending towards it, if she does not, as will be the necessary effect of her farther progress in accumulation of capital, attend more to her domestic agriculture, and the improvement of her noble colonies.

If, then, by accumulation, our author means only too great accumulation of stock, (that is, a greater aggregation of capital by parsimony, than can be employed,) we have only to deny the novelty or importance, not certainly to dispute the truth of his doctrine. But we must add, that the same doctrine must be extended to all accumulation of capital whatever; for, whether the stock of a community is made greater by a retrenchment of expenditure,

expenditure, or by an augmentation of production, the impossibility of finding profitable employment for the superfluous wealth must be equally apparent. The only difference is, that this impossibility will, in the one case, force the parsimonious to enjoy what they formerly accumulated; and, in the other case, it will force them to enjoy more than ever they could afford to consume.

If, however, our author means to deny, in general, the powers of parsimony to increase wealth, we must remind him that it is only by saving out of the revenue of the community that it ever can be augmented at all; for surely it requires no form of reasoning to prove, that if *all* the return, *i. e.* the consumeable capital with its profits were consumed in one year, nothing but the land and water would remain for the next; and that if this year's addition, *i. e.* the net profits of the capital for one year, were wholly consumed, the society would be no richer this year than the last. An author whose main doctrine is, that capital acts as a machine, in supplanting labour and increasing the natural powers of man, cannot certainly maintain, as a corollary from his proposition, that the consumption, in other words, the destruction of this machine, makes no difference upon the aggregate of valuable possessions.

Lord Lauderdale applies, at very great length, his doctrine of accumulation to the plan of paying off public debts by sinking funds. He is peculiarly severe upon Mr Pitt's celebrated scheme for this purpose; and, indeed, seems disposed to treat all such projects with considerable levity and contempt.

The observations offered above seem to furnish a sufficient answer to his reasoning on this topic.—We request the noble author's attention, however, to the following particulars, which his leaning towards a paradox, and his apparent prejudice against the scheme we have mentioned, appear to have kept entirely out of his view.

1. When Lord Lauderdale ridicules the idea of money increasing *ad infinitum* by compound interest, and treats as absurd the calculations that have been instituted with respect to the sum which a penny laid out in this way eighteen hundred years ago would now have produced, he utterly forgets the necessary conditions of the question, *viz.* that a revenue should always exist at least proportional to the augmentation of the original sum. For, who ever maintained, that, in point of fact, a penny would now produce five hundred millions of solid globes of gold, when a millionth part of so much gold never existed in the world? If, however, the penny had been laid out at compound interest, and if the process of its accumulation did not alter (as it must have done)

done) the rate of its profits, no one can deny that the holder who so employed it, would long ere now have been possessed of all the gold in the world, and even of all that new gold which the demand would have tended to produce. It never was imagined that the operation of compound interest actually created metal, or made the penny a globe of gold; but only that it transferred a constantly increasing amount of gold into the accumulator's hands.

2. When Lord Lauderdale recommends us to leave the parsimonious plan of accumulating by sinking funds, he should remember that this parsimony is only intended to correct the evil effects of former prodigality. No one can deny that the immense sums formerly withdrawn from private revenue, and wastefully spent by the Public, would have accumulated, in the interval, by the thousand processes of private ingenuity and parsimony. The sinking fund only restores such sums to their former proprietors, who receive them gradually, and place them in the channels left empty by the loans originally contracted.

3. If any sudden payment of a large capital of debt were made, no doubt it would be inconvenient to the public creditor, who might not find it easy to discover means of employing it; but if paid piecemeal, it will easily find means of investment, even though it is supposed to be constantly *created* and not *shifted*; unless we imagine that all the channels of trade, manufactures, and agriculture, whether domestic or colonial, are absolutely full of as much stock as they can receive.

4. Let it, however, be remembered, that the capital paid off by any operation of a sinking fund, must have previously existed in the form of revenue. The state must have received it in taxes upon individuals who had produced it as profit from time to time. The capital, therefore, is only transferred, nay more, would actually have existed, had it not passed through the hands of the government; for part of it has been necessarily expended as *revenue*, by the managers of the funds, which would have remained in the hands of the producers, had there been no impost levied.

We have shown, in another place, that the proper annual fund of taxation is the overplus of the net profits of the community in each year, which remains after defraying the capitalists' expenses. The effect of the imposts must no doubt be, in some cases, to diminish expenditure; but, in the great proportion of instances, it must necessarily fall upon that portion of the clear annual gains which, if left untouched, would have gone to increase the capital, and be employed in gaining new profits. As much of this portion, then, as is raised by impost, and convert-

ed, by the process of the sinking fund, into capital, is only taken from one employment to another; from performing the function and seeking the distribution of stock in the tax-payers' hands, to performing the same function and seeking the same distribution in the stockholders' hands. But even if we suppose the taxes to be levied entirely on the portion of annual profits reserved for consumption, it is evident that this portion, after it has been transferred to the public creditors, will return to the service of the former owner, if he can afford to borrow it, *i. e.* if it is expedient for the community that he should spend it; so that there will be as much expenditure still as the fulness of the channels of employment of stock requires, and the circumstances of the society authorise.

We refer our readers to the review of Bishop Watson's Speech, No. VI. for an exemplification of the effects produced by sinking funds, the necessary effect of the funding system, and of the manner in which the distribution of capital accumulated by this process takes place.

We shall now only remark, that this part of Lord Lauderdale's work appears to us the most unmeasured and prejudiced of his whole speculations. It is, with the exception of a few just remarks on commercial restraints) the only practical application of his theory which he has thought fit to favour us with; and, in that point of view, the excellence of the fruit does not certainly lead us to recal the general opinion which we have been led to form of the tree, by examining its roots, its trunk and ramifications.

Before concluding, we have to remark, that the style of this work is by no means either elegant, perspicuous, or correct. It does not indeed contain any marks of a corrupted taste, but it exhibits no proofs of a refined one. In one particular, Lord Lauderdale is extremely reprehensible; he entirely mistakes the meaning of several very common phrases, and even of single words. There are, for example, scarcely two pages of the whole work in which we do not find him using *alone* for *only*. All this, however, is of little consequence, after the fundamental and universal objections which have been urged against this volume.

We have now only to apologize for drawing this article to so great a length. We conceived that talents, and a station like Lord Lauderdale's, might have the effect of misleading the Public. Nothing published by such an author can be indifferent; and the circumstances in which he stands have frequently tended to impede the progress of science which they have failed to accelerate. His talents and rank, in the present instance, we think greatly misapplied. The importance of his subject—the names
of

of those illustrious men whose authorities he has disputed—the nature of the truths which he has attempted to subvert—all these considerations have induced us to follow him step by step, and to complete, by this painful process, the proofs on which our general opinion of the book rests. In the course of the inquiry, we have been led to a statement of some fundamental doctrines of political economy, closely connected with the work before us—and likely, we should hope, to facilitate the study, if they should not aid the progress of the most valuable of sciences.

ART. IX. *Letters written by the late Earl of Chatham, to his Nephew Thomas Pitt Esquire, afterwards Lord Camelford, then at Cambridge,* 2d Edit. 8vo. pp. 133. London, Payne. 1804.

IT is singular that some of the most illustrious persons in modern history, after occupying an unexampled share of public regard, should have gone down to the grave without exciting any of that posthumous solicitude which inferior wits and leaders of the fashion in matters of literature and society, have often monopolized to an extravagant degree. The conversations of Johnson, the correspondence of Gibbon, and the more trifling effusions of Lady Mary Wortley Montagu, have long exercised an undisputed sway over the curiosity of the world, while the very inadequate memoirs which have been preserved of Lord Mansfield and Lord Chatham, seem to have completely satisfied the demand for information respecting those illustrious characters. Much of this indifference is certainly owing to the belief that men of such a stamp had no time for those pursuits which render a more trivial life fruitful in amusing incidents, nor any leisure for the occupations which are calculated to carry down their private character to posterity. While the deeds of such men are matter of history, and flourish in the lasting records of public annals, the actions of the writers who delight and instruct mankind consist in their feats of conversation, their ordinary intercourse with the world, their epistolary communications, and various other transactions important in their unvarying and private scenes, but naturally viewed as the most trivial of all the occurrences which diversify the lives that are spent in the great tumult of affairs. It happens, in reality, that the private characters and familiar intercourse of those men, whom of all others it would be most interesting to follow out of the senate and the forum, are in general marked by a species of carelessness and flatness, which tends greatly to repress or to disappoint our curiosity: and the letters of Lord Chatham may not only be such

as would excite no regard whatever, were they attached to another name, but even such as to raise little emotion, though given to the world as *his* authenticated productions.

We do not hesitate to affirm, that a part at least of this remark applies to the volume actually before us. The letters which compose it derive their whole interest from the character of their author. In the portfolio of an ordinary man, they would have had no chance of being preserved. But who is there that would not seize with eagerness upon any such memorial of the '*minister of the people*'—the '*great commoner*'—the ruler of the house of Brunswick—the conqueror of Indostan and Canada—the terror of the Bourbons in their proudest days? To have the power of following such a man into the relaxations and duties of his private hours, is the distinguished privilege of these modern times, which are enlightened and adorned by an universal diffusion of literary pursuits. To pry into the retirement of the great, is one of the exquisite luxuries of learning—one of the refinements in which modern delicacy and taste indulge. The name of Chatham is no sooner pronounced, than a multitude of associations are excited to awaken our curiosity; and we become suddenly prepared to feel the liveliest interest in the most trivial document of his private occupations and character, which is handed down to us with sufficient authenticity.

Such were the feelings with which we first opened the volume now before us, hopeful that its merits might bear some inverse proportion to its bulk, but perfectly assured that nothing which related to so eminent a man could be perused without a very high degree of interest. And, truly, nothing can be more pleasing than the examination actually proves. Literary merit—depth of reasoning, or extent and sagacity of observation—extraordinary stores of learning, or flashes of eloquence—these certainly are not what we wished to find in the most careless and artless effusions of that illustrious statesman, in letters dictated by the warmth of an affection almost maternal, during the minutes snatched from the most bustling period of his political career. But we discover, in every line of these interesting relics, features of a mind as lovely, as we know from other sources that it was powerful and accomplished. We discover unerring proofs that Lord Chatham was as amiable in the private relations of life, as the annals of the old and the new world proclaim him to have been transcendently great in the management of affairs. We are constantly delighted with traits of an union, extremely rare in the human character, of the stronger passions and grandest powers of the mind with its finer feelings and nicer principles. We meet with perpetual evidence, that neither the intrigues

intrigues of courts, nor the contentions of popular assemblies, had ever effaced from this great man's heart those early impressions of virtue and of piety with which almost all are provided at their outset, but which so few are enabled to preserve even from the dangers and seductions of an obscurer fortune. It is entirely in this point of view that we are disposed to regard the present publication; and, aware that our readers may feel somewhat of the same interest in its contents, we hasten to make them acquainted with the book, chiefly by directing their attention to such extracts as struck us most in perusing it...

The letters are introduced by a very elegant and appropriate dedication to Mr Pitt, and by a well-written preface, in which the editor (Lord Grenville) delivers some judicious remarks upon the valuable remains that he is ushering into the world.

'The following correspondence, imperfect as it is, (and who will not lament that many more such letters are not preserved?) exhibits a great orator, statesman and patriot, in one of the most interesting relations of private society. Not, as in the cabinet or the senate, enforcing, by a vigorous and commanding eloquence, those councils to which his country owed her pre-eminence and glory; but implanting, with parental kindness, into the mind of an ingenuous youth, seeds of wisdom and virtue, which ripened into full maturity in the character of a most accomplished man; directing him to the acquisition of knowledge, as the best instrument of action; teaching him, by the cultivation of his reason, to strengthen and establish in his heart those principles of moral rectitude which were congenial to it; and, above all, exhorting him to regulate the whole conduct of his life by the predominant influence of gratitude and obedience to God, as the only sure ground-work of every human duty!

'What parent, anxious for the character and success of a son, born to any liberal station in this great and free country, would not, in all that related to his education, gladly have resorted to the advice of such a man? What youthful spirit, animated by any desire of future excellence, and looking for the gratification of that desire in the pursuits of honourable ambition, or in the consciousness of an upright, active, and useful life, would not embrace, with transport, any opportunity of listening on such a subject to the lessons of Lord Chatham? They are here before him. Not delivered with the authority of a preceptor, or a parent, but tempered by the affection of a friend towards a disposition and character well entitled to such regard.' p. x.—xiii.

Lord Grenville follows up these introductory remarks by some eloquent and profound observations upon several points, on which his opinions differ widely from those delivered by Lord Chatham in these letters. His dissent is chiefly entered on the two following topics—the merits of Lord Bolingbroke's '*Remarks on the English History*,' which he justly thinks Lord Chatham very much overrated, whether we consider the purity and precision of the

the style, the sagacity of the remarks, or the fidelity of the narrative—and the judgment insinuated by Lord Chatham upon the integrity of Lord Clarendon's character. Into the defence of that celebrated statesman, the noble editor enters with great earnestness and irresistible effect. His eloquent exposition of Lord Clarendon's conduct, is naturally mingled with remarks upon the characters of the two masters whom he served; and the whole passage is distinguished by so much force of diction, and genuine liberality of sentiment, that our readers will thank us for extracting it entire. The tenor of Lord Grenville's public life, and the general principles of policy which have guided his discourses in the senate, would not, perhaps, lead us to expect from his pen an ample recognition of true Whig principles, on a question always taken as a general test. At the same time, we must disclaim any paltry intention of imputing inconsistency to that distinguished statesman. We are still less capable, we hope, of insinuating that his opinions have been modified, in any degree, by the unprecedented divisions and combinations which have signalized the recent history of British parties. We deduce the free current of his remarks from a very different source, and consider them as the real sentiments which he has always entertained upon abstract questions, and which he would have openly avowed, had the circumstances of the times demanded or justified a discussion of such general principles. For the rest, we do not remember ever to have met with a more impartial view of the great question regarding the civil war, than appears to have dictated the following striking observations.

' Clarendon was unquestionably a lover of truth, and a sincere friend to the free constitution of his country. He defended that constitution in Parliament, with zeal and energy, against the encroachments of prerogative, and concurred in the establishment of new securities necessary for its protection. He did, indeed, when these had been obtained, oppose, with equal determination, those continually increasing demands of Parliament, which appeared to him to threaten the existence of the monarchy itself; desirous, if possible, to conciliate the maintenance of public liberty with the preservation of domestic peace, and to turn aside from his country all the evils to which those demands immediately and manifestly tended.

' The wish was honourable and virtuous, but it was already become impracticable. The purposes of irreconcilable ambition, entertained by both the contending parties, were utterly inconsistent with the re-establishment of mutual confidence. The parliamentary leaders openly grasped at the exclusive possession of all civil and all military authority: And on the other hand, the perfidy with which the King had violated his past engagements, still rankled in the hearts of his people, whose just suspicions of his sincerity were continually renewed by the unsteady-

ness of his conduct, even in the very moments of fresh concession : while, amongst a large proportion of the community, every circumstance of civil injury or oppression was inflamed and aggravated by the utmost violence of religious animosity.

' In this unhappy state, the calamities of civil war could no longer be averted ; but the miseries by which the contest was attended, and the military tyranny to which it so naturally led, justified all the fears of those who had from the beginning most dreaded that terrible extremity.

' At the Restoration, the same virtuous statesman protected the constitution against the blind or interested zeal of excessive loyalty ; and, if Monk had the glory of restoring the monarchy of England, to Clarendon is ascribed the merit of re-establishing her laws and liberties : a service no less advantageous to the crown, than honourable to himself, but which was numbered among the chief of those offences for which he was afterwards abandoned, sacrificed, and persecuted by his unfeeling, corrupt, and profligate master.

' These observations respecting one of the most upright characters of our history, are here delivered with freedom, though in some degree opposed to so high an authority. The habit of forming such opinions for ourselves, instead of receiving them from others, is not the least among the advantages of such a course of reading and reflection as Lord Chatham recommends.' p. xviii.—xviii.

Having called the attention of our readers, in the first instance, to the valuable preface of Lord Grenville, we must be permitted, before proceeding to the work itself, to suggest one slight criticism upon a quotation which he has introduced. Speaking of the late Lord Camelford, he exclaims, in the words, perhaps—but surely neither in the spirit, nor even in the language of Virgil,

' *Quæ gratia vivo*——

——*Eadem sequitur tellure repòstum !*

Such applications and travesties of classical authors, we wholly disapprove. The meaning of the Roman poet, in the following passage, from which the preceding words have been picked and put together as they might have been from a *Gradus*, is, not that certain worthies were beloved after death, as they had been during their lives—but that charioteers and horsemen, drivers and horse-jockies, retain the same love of curricles and horse-flesh, in the other world, which they had manifested on earth—

' *Quæ gratia currum*

Amorumque fuit vivis, quæ cura nitentes

Pascere equos ; eadem sequitur tellure repostos.' *Æn.* VI. 653.

This kind of quoting and applying classical passages, would justify the friends of a pugilist in prefixing to his memoirs some of the famous lines which follow the passage already quoted by Lord Grenville. For example,

' *Hic manus in patriâ pugnando vulnera passi*——

——*Quicquid sui memores alios fecere.*' *Ibid.*

We have already premised, that the epistolary remains of Lord Chatham are chiefly interesting, from the careless simplicity and earnestness of heart which appear to have dictated every line of them. They are addressed to a very young man, on the entrance of his academical career; and nothing is more remarkable than the uniform seriousness with which the illustrious Mentor calls his pupil's attention to every thing allied to the pursuits of virtue. This spirit, indeed, is mingled with every topic, and seems to have pervaded the whole feelings of the writer.

'I rejoice (says he in Letter II.) to hear that you have begun Homer's Iliad, and have made so great a progress in Virgil. I hope you taste and love those authors particularly. You cannot read them too much: they are not only the two greatest poets, but they contain the finest lessons for your age to imbibe: lessons of honour, courage, disinterestedness, love of truth, command of temper, gentleness of behaviour, humanity, and, in one word, virtue in its true signification. Go on, my dear nephew, and drink as deep as you can of these divine springs: the pleasure of the draught is equal at least to the prodigious advantages of it to the heart and morals. I hope you will drink then as somebody does in Virgil, of another sort of cup: *Ille Impiger hausit spumantem Pateram.*' p. 6, 7.

That our author, however, had justly appreciated the subordinate importance of such studies, is apparent from a striking passage in a subsequent letter.

'I beg a copy of your elegy on your mother's picture: it is such admirable poetry, that I beg you to plunge deep into prose and severer studies, and not indulge your genius with verse, for the present. *Finitimus Oratori Poeta.* Substitute Tully and Demosthenes in the place of Homer and Virgil; and arm yourself with all the variety of manner, copiousness and beauty of diction, nobleness and magnificence of ideas of the Roman consul; and render the powers of eloquence complete, by the irresistible torrent of vehement argumentation, the close and forcible reasoning, and the depth and fortitude of mind of the Grecian statesman. This I mean at leisure intervals, and to relieve the course of those studies which you intend to make your principal object.' p. 88, 89.

Those happy spirits who deride every thing but eloquence and wit, and who contemptuously pass over all exhortations to the pursuits of virtue, as sermons or moralizing, if they are not delivered in epigram, may perhaps wonder to find such a passage as the following in the letters of such a man as Lord Chatham:

'I say, you have the true clue to guide you, in the maxim you lay down in your letter to me, namely, that the use of learning is, to render a man more wise and virtuous, not merely to make him more learned. *Macte tua Virtute;* Go on, my dear boy, by this golden rule, and you cannot fail to become every thing your generous heart prompts you to wish to be, and that mine most affectionately wishes for you. There is but one danger in your way; and that is, perhaps, natural enough

enough to your age, the love of pleasure, or the fear of close application and laborious diligence. With the last there is nothing you may not conquer: and the first is sure to conquer and enslave whoever does not strenuously and generously resist the first allurements of it, lest, by small indulgencies, he fall under the yoke of irresistible habit. *Vitanda est Improbæ Siren, Desidia*, I desire may be affixt to the curtains of your bed, and to the walls of your chambers. If you do not rise early, you never can make any progress worth talking of: and another rule is, if you do not set apart your hours of reading, and never suffer yourself or any one else to break in upon them, your days will slip through your hands unprofitably and frivolously; unpraised by all you wish to please, and really unenjoyable to yourself. Be assured, whatever you take from pleasure, amusements, or indolence, for these first few years of your life, will repay you a hundred fold, in the pleasures, honours, and advantages of all the remainder of your days. My heart is so full of the most earnest desire that you should do well, that I find my letter has run into some length, which you will I know, be so good to excuse. p. 10-12.

Now the person who felt so ardently the force of moral and of religious sentiments, was not a mere pedant either in literature or state affairs; he valued in their just proportion the mere considerations of external propriety and even elegance. The following extract will show how highly he estimated those accomplishments, which only fail, in a wise man's opinion, when their true foundation in the more solid graces of the mind is removed; and never appeared ridiculous or disgusting, until Lord Chesterfield was supposed to have proclaimed them as the chief end of man.

'Behaviour is of infinite advantage or prejudice to a man, as he happens to have formed it to a graceful, noble, engaging, and proper manner; or to a vulgar, coarse, ill-bred, or awkward and ungenteel one. Behaviour, though an external thing which seems rather to belong to the body than to the mind, is certainly founded in considerable virtues: though I have known instances of good men, with something very revolting and offensive in their manner of behaviour, especially when they have the misfortune to be naturally very awkward and ungenteel; and which their mistaken friends have helped to confirm them in, by telling them they were above such trifles, as being genteel, dancing, fencing, riding, and doing all manly exercises, with grace and vigour. As if the body, because inferior, were not a part of the composition of man; and the proper, easy, ready, and graceful use of himself, both in mind and limb, did not go to make up the character of an accomplished man. You are in no danger of falling into this preposterous error: and I had a great pleasure in finding you, when I first saw you in London, so well disposed by nature, and so properly attentive to make yourself genteel in person, and well-bred in behaviour. I am very glad you have taken a fencing master: that exercise will give you some manly, firm, and graceful attitudes; open your chest, place your
head

head upright, and plant you well upon your legs. As to the use of the sword, it is well to know it: But remember, my dearest nephew, it is a science of defence: and that a sword can never be employed by the hand of a man of virtue in any other cause. As to the carriage of your person, be particularly careful, as you are tall and thin, not to get a habit of stooping; nothing has so poor a look: above all things, avoid contracting any peculiar gesticulations of the body, or movements of the muscles of the face. It is rare to see in any one a graceful laughter: it is generally better to smile than laugh out, especially to contract a habit of laughing at small or no jokes. Sometimes it would be affectation, or worse, mere moroseness, not to laugh heartily, when the truly ridiculous circumstances of an incident, or the true pleasantry and wit of a thing, call for and justify it; but the trick of laughing frivolously is by all means to be avoided: *Risu inepto, Res ineptior nulla est*. Now, as to politeness; many have attempted definitions of it: I believe it is best to be known by description; definition not being able to comprise it. I would, however, venture to call it benevolence in trifles, or the preference of others to ourselves in little daily, hourly occurrences, in the commerce of life. A better place, a more commodious seat, priority in being helped at table, &c. what is it, but sacrificing ourselves in such trifles to the convenience and pleasure of others? And this constitutes true politeness. It is a perpetual attention (by habit it grows easy and natural to us) to the little wants of those we are with, by which we either prevent or remove them. Bowing, ceremonious, formal compliments, stiff civilities, will never be politeness: that must be easy, natural, unstudied, manly, noble, And what will give this, but a mind benevolent, and perpetually attentive to exert that amiable disposition in trifles towards all you converse and live with? Benevolence in greater matters takes a higher name, and is the queen of virtues.' p. 32,—37.

We challenge the admirers of Lord Chesterfield to produce a more winning, and at the same time a more judicious and ingenious defence of all that part of manners which is worthy of a reasonable being's regard, in the whole writings of their master.

The very trifles of manner and etiquette appear to have had their just share of Lord Chatham's regard. He concludes one of his gravest letters with the following advice: 'Pardon an observation on style. *I received yours*, is vulgar and mercantile; *your letter* is the way of writing. Inclose your letters in a cover; it is more polite.' (p. 67.)

In the minuter parts of conduct, as well as manners, the advices given in these Sketches are equally sedulous. Upon the subject of early rising, he is peculiarly importunate. Besides the passage above quoted on this head, he says, in Letter VII.

'Do you rise early? I hope you have already made to yourself the habit of doing it: If not, let me conjure you to acquire it. Remember your friend Horace—

——' Et

Et ni

Posces ante diem librum cum lumine ; si non

Intendes animum studiis, et rebus honestis,

Invidiâ vel amore miser torquere—' p. 51-52.

With how much force do such solemn admonitions on the sublime matters of piety and morals, as these letters all abound in, come from a person so intimately acquainted with every variety of human life—so strictly speaking a man of the world !

We recommend the following admirable passages to all those light and thoughtless persons, who are pleased to regard every sentiment, of a moral or religious tendency, as the growth of monkish seclusion and ignorance of the world, or as the offspring of a sullen bigotry and weakness of understanding ; only premising that they are the earnest, undisguised effusions of an unrivalled statesman and orator, poured forth at the very moment in which his whole mind was distracted by the weight of public affairs, and the intrigues of a factious court ; addressed to an *elève*, whom it was his anxious wish to form into the habits of a consummate politician, and ushered into the world by the two greatest courtiers and public characters of the present day.

' If any thing, my dear boy, could have happened to raise you higher in my esteem, and to endear you more to me, it is the amiable abhorrence you feel for the scene of vice and folly, (and of real misery and perdition, under the false notion of pleasure and spirit), which has opened to you at your college, and, at the same time, the manly, brave, generous, and wise resolution and true spirit, with which you resisted and repulsed the first attempts upon a mind and heart, I thank God, infinitely too firm and noble, as well as too elegant and enlightened, to be in any danger of yielding to such contemptible and wretched corruptions.' p. 18-19.

' As to your manner of behaving towards these unhappy young gentlemen you describe, let it be manly and easy ; decline their parties with civility ; retort their raillery with raillery, always tempered with good breeding. If they banter your regularity, order, decency, and love of study, banter in return their neglect of them ; and venture to own frankly, that you came to Cambridge to learn what you can, not to follow what they are pleased to call pleasure. In short, let your external behaviour to them be as full of politeness and ease as your inward estimation of them is full of pity, mixed with contempt. I come now to the part of the advice I have to offer to you, which most nearly concerns your welfare, and upon which every good and honourable purpose of your life will assuredly turn ; I mean the keeping up in your heart the true sentiments of religion. If you are not right towards God, you can never be so towards man : The noblest sentiment of the human breast is here brought to the test. Is gratitude in the number of a man's virtues ? If it be, the highest Benefactor demands the warmest returns of gratitude, love, and praise : *Ingratum qui dixerit, omnia dixit.* If a

man wants this virtue where there are infinite obligations to excite and quicken it, he will be likely to want all others towards his fellow-creatures, whose utmost gifts are poor, compared to those he daily receives at the hands of his never-failing Almighty Friend. Remember thy Creator in the days of thy youth, is big with the deepest wisdom : The fear of the Lord is the beginning of wisdom ; and, an upright heart, that is understanding. This is eternally true, whether the wits and rakes of Cambridge allow it or not : Nay, I must add of this religious wisdom, Her ways are ways of pleasantness, and all her paths are peace, whatever your young gentlemen of pleasure think of a whore and a bottle, a tainted health and battered constitution. Hold fast therefore by this sheet-anchor of happiness, Religion ; you will often want it in the times of most danger—the storms and tempests of life. Cherish true religion as precious as you will fly with abhorrence and contempt superstition and enthusiasm. The first is the perfection and glory of the human nature ; the two last the depravation and disgrace of it. Remember the essence of religion is, a heart void of offence towards God and man ; not subtle speculative opinions, but an active vital principle of faith. The words of a heathen were so fine, that I must give them to you : ‘ *Compositum Jus, Fasque Animæ, Sanctosque Recessus Mentis, et incoctum generoso Pectus Honesto.*’

Go on, my dear child, in the admirable dispositions you have towards all that is right and good, and make yourself the love and admiration of the world ! I have neither paper nor words to tell you how tenderly I am yours.’ p. 24—28.

Such was the illustrious Lord Chatham in his private life ; and so pure and lovely were the inmost sentiments of that great spirit which humbled France and subdued America—which baffled the intrigues of the court, and overawed the turbulence of the senate.

The publication of these precious remains is indeed highly important ;—important as an object of laudable and dignified curiosity—doubly important as a practical lesson and example of eminent virtue.

ART. X. *Celtic Researches, on the Origin, Traditions, and Language of the Ancients Britons ; with some Introductory Sketches on Primitive Society.* By Edward Davies, Curate of Olveston, Gloucestershire. London, 1804. 8vo. pp. 561.

IT is amusing to observe with what perseverance and success the Celts are proceeding in their endeavours to deserve that character which has been so liberally bestowed upon them by the most contemptuous of their opponents. Every one must remember the emphatic epithets with which Pinkerton in particular has branded this ill-fated race. According to him, a Celtic understanding

understanding is *sui generis*: it readily embraces and believes whatever is rejected or laughed at by the rest of mankind. If there be any truth in this description, we think there is great reason to presume that the Celtic writers of the present day, despairing perhaps of deriving the general population of Europe from their own illustrious stock, are anxious at least to satisfy the world that they themselves are the genuine descendants of those mighty tribes: and certainly, if strong mental resemblance and striking affinity of disposition may be admitted as presumptive evidence of direct and pure descent, they must be considered as having made good their pretensions. Let our readers only compare the character of the old Celts as given by the ancient writers, particularly by Diodorus Siculus, with that which the Gael and the Cymri of the present day exhibit in their writings. Diodorus describes them as fond of enigmas; making general assertions, where they were not supported by a sufficient number of facts; and hyperbolical both in praising themselves and in despising others.*

The Milesian fables of the Irish have long convinced the world, more powerfully and completely than the most learned and positive authorities, that they are a legitimate branch of the Celts. The Welsh, though they have been much later in starting than the Irish, and are even yet less Celtic in their creed and character, appear to have lately recovered their generic and distinctive credulity in its utmost purity, and, of course, along with their credulity, materials for authentic history, as far back as their present dispositions would lead them to desire. The Irish, now that they have seen a 'Sketch of the early History of the Ancient Britons from the year 700 before Christ,'† must allow the consanguinity of the Cymri; and attribute their own more venerable and more ample accounts entirely to their being descended from the *Gael*, who first left the original seat of the Celts, and may therefore be supposed to have brought along with them more copious and accurate documents of the condition and exploits of their ancestors. The Welsh, however, need not despair of speedily obliterating all difference between the Irish and themselves, in these respects, if they continue their efforts to shake off Gothic scepticism with as much perseverance and success as they have exhibited within these few years.

Though the Irish have great reason to be proud of General Vallancey, the Welsh need not shrink back from the competition, while they have to boast of Mr Davies, who seems to unite the

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inventive

* Diodorus Siculus, lib. V. p. 213. edit. H. Stephan.

† Lately published by the Rev. P. Roberts, M. A.

inventive imagination of a poet with that rare talent of discovering resemblance in objects the most dissimilar, which has been considered as the characteristic of men of wit. Like a generous rival, Mr Davies indeed acknowledges that he is indebted to the General for many of his illustrations and arguments : But he is by no means a servile imitator ; and, what will surprise those who have read the works of the General, he has even improved upon what he has borrowed. In the first part of his work, he presents us with ‘ sketches of the state and attainments of *primitive society*.’ On this subject he has contrived to make many surprising discoveries. According to him, philosophers are utterly mistaken in supposing man, in his primitive state, to have been a savage : On the contrary, he was intimately acquainted, not only with most branches of science, but also with those simple but sublime truths, for which we ignorantly imagine ourselves indebted to the feeble and degenerated minds of a Bacon and a Smith. To Adam, or, at least, to his immediate antediluvian descendants, the benefits of the division of labour, and the inductive philosophy, were intimately known : (p. 8, 9.) The scale of harmonious sounds, of which the Greeks were utterly ignorant, was understood by primitive man, and applied in the formation of the most intricate and powerful instruments. But, what is still more extraordinary, these antediluvians did not pursue the modern tardy course of improvement, but invented at first all that was most difficult and perfect, and left the easier task of deterioration to their descendants. Stringed instruments were known to them before wind instruments ; and they could *make* brass, before they could prepare iron. Mr Davies is content with tracing the Celts up to Gomer. We would advise him, in the next edition of his work, to carry them into the antediluvian ages, and to adduce these instances of a retrograde understanding, as proofs that Celts existed at that early period.

Mr Davies, in his preface, expresses ‘ the deep and permanent obligation’ which he owes to the Bench of Bishops collectively. In our opinion, he has amply repaid them, by having proved, as satisfactorily at least as he has proved any other of his positions, that the ‘ consecration of tithes did not originate in the Levitical law,’ (p. 17.) ; but that the right to them is much more ancient, and consequently much more indisputable and sacred. He even insinuates, that ‘ the charge alleged against Cain of *not rightly dividing*, as it is rendered by the Seventy,’ is best explained, by supposing that it alludes to some unfair practices of his in the payment of his tithes.

There is nothing new, we are told, under the sun ; and some persons

persons have extended this doctrine so far, as to assert, that minds very similar to those of the greatest modern philosophers, must have existed in the ancient world. Mr Davies is evidently of this opinion; the primitive ages, according to him, had their 'Linnæi and their Buffons,' (p. 19.); and, in the eleventh chapter of Leviticus, he finds a complete systematic arrangement of quadrupeds and fishes.

In page 33. the geographical knowledge of Noah is detailed :

'The very idea of Noah's dividing the land amongst his descendants, necessarily presupposes his knowledge of the land that was to be so divided. He must have described the several states, their extent and boundaries, by certain names. And these, in general, could have been no other than the names by which the same regions, rivers and mountains had been already known to him, and consequently, which they had borne before the flood. Thus may we account for the identity of the names of several streams and mountains in ancient geography, from India to Britain, and from the Northern Ocean to the Middle of Africa.

We are surprised that Mr Davies has not drawn the natural inferences from this discovery; and that he has not attributed the invention of maps to the antediluvians; since, without these, Noah could not have made his descriptions so convenient and luminous as he might have done with their assistance. Several other inferences might be drawn, all of which are so congenial to a Celtic understanding, that we wonder how they could have escaped Mr Davies.

As our author has made it so very probable that Noah kept a regular and full journal or log-book of the occurrences that took place in the ark (p. 43—45.), we would strongly advise him, or his fellow-labourer General Vallancey, who has already been so successful in recovering Irish tree-alphabets, to make diligent search for this valuable relic, which will be very acceptable to all *genuine* antiquarians, and particularly serviceable to Mr Clarke in the compilation of his 'Progress of Maritime Discovery.'

We shall conclude the consideration of the first part of Mr Davies's work, with laying before our readers one of the most notable and curious discoveries which it contains.

Babel, it seems, is not the proper or original name of that tower, during the building of which the confusion of tongues (an event which has afforded so much delight to etymologists, that they have made great exertions to bring it about a second time) is recorded to have taken place. Mr Davies deserves great credit, both for having proved that Babel is not 'a play on the original name, or at all similar to it' (p. 58.); and for having discovered, after the lapse of 5000 years, not merely what the tower was actually called, but what the builders meant to have called it, provided they had completed it.

‘The children of men said, Let us build a city, and a tower, and let us make a name or renown. This was the order by which they ascended the climax of their ambition; but, when they had attained the highest top, they must, from thence, have named their city. They must have called it *Shem*, the *name*, or *renown*. The other degrees would naturally be subjoined, to make out its description. Thus it became “*RENOWN*, the City of the Tower.” p. 58.

Notwithstanding the originality of these speculations, we must confess that we turn away, with feelings of weariness, from the first part of our author's performance. The objects on which his credulity delights to dwell, are so little varied, and so uninteresting; and his conjectures so little supported by argument, or adorned by learning, that we are more disposed to lament the weakness of the human understanding, than to be amused with its eccentricities.

In the second part, he treats of the ‘origin of the Celtic; their institution of Druidism; and their pretension to the knowledge of letters.’ (p. 117.) Of our author's ability to discuss points so remote and obscure, and on which men of real learning have either been silent, or delivered their opinions with diffidence, our readers may judge, by one specimen, taken from his account of times better known, and of a people with whose progress we are comparatively well acquainted.

‘The Sarmatæ held these territories (Germany) before the aggrandisement of Gothic power!—It is not pretended that, at any time, this handful of men (the Venedi or Wendi) penetrated into the possessions of the Goths, or acquired an establishment by victories.’—‘The Sarmatæ then, or *Scalavonæ*, were those whom the Goths found in the land of Riphath, or the eastern division of ancient Germany.’ p. 125, 126.

How such assertions could have been made, in direct opposition to every authority on the subject, we are altogether unable to comprehend.

In page 143. Mr Davies presents us with a very delectable specimen of a Celtic commentary on Virgil.

‘This great bard was borne in Cisalpine Gaul, and seems, in his youth, to have courted the *Gaulish muse*, till he found that she would not advance his fortune—a very unpoetical ground of desertion—

————— ‘*Galatæa reliquit* :

Namque ;—*fatebor enim*—*dum me Galatæa tenebat*,

Nec spes libertatis erat, nec cura peculii.

Galatæa was the mother of the Celts. APPIAN. Bell. Illyr.’

No mere Gothic reader, we will venture to assert, ever suspected the poet to be speaking of a personage so dignified; nor is it very easy to perceive how ‘the mother of the Celts’ and ‘the Gaulish muse’ should be one and the same person.

As Mr Davies has succeeded so well in this attempt, we would recommend to him to extend his commentary to the writings of Ovid, where he will find a great deal more about Galatæa. He who can find Celtic traditions in Virgil, will have a noble field for the exercise of his fancy, and the display of his credulity, in the *Metamorphoses* of Ovid.

In page 146, Mr Davies considers the antiquities found at Stonehenge, Abury, and other parts of Britain, as Druidical. As this opinion, which appears to us to rest on very questionable grounds, has been very generally received by the writers of this country, it may be worth while to consider the authorities and arguments on which it is founded. It is necessary, however, to premise some few observations on the origin and ancient extent of the Druidical superstition.

No writer, we believe, has ventured to offer any thing more than mere conjecture respecting the origin of Druidism, except Mr Pinkerton. To him, conjecture was almost entirely unknown, since it implied diffidence and modesty. He had gained credit for research and learning: he knew the imposing effects of a dogmatical and bold assertion: and, when he was unable to find the very few materials which he required for the fabrication of authority, he came forward with his own oracular and sententious decision: 'Druidism was palpably Phœnician.*' In proof of this assertion, Mr Pinkerton refers us, in a note, to the 68th page of his *Dissertation on the Goths*; but in this passage, instead of supporting his opinion by authorities, he merely amplifies and repeats the assertion. 'The god Baal, Bel, Belenus; the transmigration of souls; the cosmogony and theogony (of the Druids) are wholly Phœnician.' As not a single author is quoted, we are at a loss to discover where Mr Pinkerton learned all this. The opinion, we believe, is supported by no writer but Baxter, Horsley, or Macpherson: and to them we can scarcely believe he would refer on such an occasion, when we recollect the anathema he has pronounced against those who are guilty of 'blending authors of the first and sixteenth centuries, that is, authorities with no authorities.†' Till Mr Pinkerton brings forward the evidence on which he grounds his assertions,

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that

* Pinkerton's *Enquiry*, I. 17.

† *Enquiry*, I. 409. Ausonius, indeed, mentions Belenus in two passages, in connexion with the Druids; but it cannot from them be inferred, either that it was the Belenus of the Phœnicians, or even that he was worshipped by the Druids. Besides, Ausonius, A. D. 379, is very insufficient evidence of the original and pure religion of the Druids.

that the transmigration of souls was a Phœnician doctrine—and that the cosmogony and theogony of the Druids were wholly Phœnician; we must be excused for not taking the trouble to prove the contrary. We have been too frequently disappointed in searching for those authorities, to which Mr Pinkerton expressly refers, not to be more than usual suspicious, where he does not preserve even the form of reference. So completely satisfied is this author, however, of the truth of his own hypothesis, that he is obliging enough to explain the whole process of the matter, and to inform us that the Phœnicians gave our ancestors their religion in exchange for tin. ‘Druidism was taught by the Phœnicians to the inhabitants of Cornwall, where they traded for tin.’* But, in the first place, though it is highly probable that the Phœnicians were acquainted with the main land of Britain, yet we have no evidence, that this was actually the case. Herodotus, Strabo, &c. mention only the *Cassiterides* as having been visited by the Phœnicians. But, independently of any thing else, it is surely sufficiently improbable that a few traders intent only on gain, and, of course, not very zealous about the religion of their native land, should take the trouble of establishing any superstitious rites among the barbarous natives of Britain. Druidism, too, with its human sacrifices and gloomy rites, does not seem to have been such an attractive or seducing form of superstition as to be readily introduced into a country by the occasional intercourse of foreign merchants: and, what appears indeed to be decisive of the question, no vestiges of this faith are to be found in Spain, where the Phœnicians firmly established themselves, and built the city of Cadiz; and where, of course, it is much more probable, that they would be disposed and able to introduce their ceremonies and belief.

The conjecture, that the Druidical superstition was taught the Gauls by Pythagoras, rests on no better foundation than the opinion of Mr Pinkerton. The Druids, indeed, coincided with that philosopher in the belief of a transmigration of the soul; though it appears, from the practical use which they made of this doctrine, in inciting their followers to a contempt of death, and to the practice of virtue, that they differed from Pythagoras, by confining the transmigration of the soul to human bodies.† But the coincidence of two superstitions in a point like this, certainly affords a very weak presumption, that the one was

* Enquiry, I. 17.

† Keyser. *Antiq. Celtic.* p. 116, 117. and the authors quoted by him.

was borrowed from the other. If, however, we suppose this to have been the case, we should rather be inclined to adopt the opinion advanced by Clemens Alexandrinus, and Eusebius,* that Pythagoras in his travels went into Gaul, and there learned the doctrine of the Metempsychosis. It is but fair, however, to mention that there is a passage of Ammianus Marcellinus, which seems to favour the Pythagorean origin of the Druids. This passage has hitherto obtained less attention and credit than it deserves, from having been supposed to contain only the opinion or evidence of Marcellinus himself, who lived A. D. 360, when the ceremonies and traditions of the Druids were wearing out: but whoever examines the context,† will be convinced that Marcellinus derived the whole of the information which he gives respecting the Gauls, from Timagenes, who lived in the time of Augustus, and appears to have been a diligent, well-informed, and learned author. The passage to which we allude, is the following: ‘Inter hos Druidæ ingenii celsiores, ut autoritas Pythagoræ decrevit, sodalitiis adstricti consortiis, quæstionibus occultarum rerum altarumque erecti sunt, et despectantes humanæ pronuntiarunt animas immortales.’‡ It may be doubted, however, whether Timagenes did not intend merely to point out a resemblance between the Druids and Pythagoreans, in the institution of fraternities; though, certainly, if we adhere to the obvious meaning of the words, we must conclude, that, at least in the opinion of Timagenes, the Druids acknowledged the authority of Pythagoras.

We are ignorant of the reason which has led antiquarians to reject or to overlook the opinion which is stated by Cesar to have been generally entertained, in his time, in Gaul, respecting the origin of Druidism. To us, it appears the best supported,

* Clement. Alexand. Stromata, lib. VI. & Eusebii Præpar. Evangel. lib. X. c. 2.

† Ambigentes super origine prima Gallorum scriptores veteres, notitiam reliquere negotii semiplenam: sed postea Timagenes et diligentia Græcus et lingua, quæ diu sunt ignorata, collegit ex multiplicibus libris: cujus fidem sequuti obscuritate dimota, eadem distinctè docebimus et aperte. Amm. Marcell. lib. XV. § 9. edit. Lugd. 1591.—For the character of Timagenes, see Quintilian, lib. X. c. 1. and Horace, Epist. lib. I. Epist. 19. l. 15, 16.

‡ A passage of similar import is to be found in Diodorus Siculus, lib. V. p. 212, where he is speaking of the religion of the Celts—‘The opinion of Pythagoras prevails among them (πισχυει παρ αυτοις ο Πυθαγορι λογος) that the souls of men are immortal, and live again after a certain period, entering into different bodies.

ed, and the most probable of any that have come down to us from antiquity. Cesar evidently took considerable pains to learn every particular relative to the Druids; and it may be remarked as a proof both of the accuracy and extent of his information, that on this subject, as well as on many others which he first investigated, subsequent authors have done little more than transcribe his accounts. He states it to have been the received opinion in Gaul, that Druidism originated in Britain; and the fact, which he expressly mentions, that in his time those who wished to become adepts in its mysteries, commonly went to Britain for that purpose, strengthens the traditionary account of the place of its origin. * If it be true that Druidism originated in Britain, the commonly received opinion, that it is strictly and absolutely a part of the Celtic religion, will be greatly weakened. Since it must have begun to exist long after the Celts had left their original settlements, it must be considered as British, and not Celtic; and it would be as absurd to extend it to all the Celts, because it originated among one branch of them, as it would be to expect to find the institution of secret tribunals in the thirteenth century, among the Swedes, as well as among the Germans, merely because they are both Gothic nations. The supposed necessary connexion between Celtic population and Druidism, has prevented antiquarians from examining the question, respecting the countries in which it can actually be proved to have existed, with clearness and impartiality.

There is not a single authority for the existence of Druidism any where, but in Celtic Gaul, and in part of England. The argument, which is drawn from the existence of *monuments* supposed to be Druidical, will be considered afterwards: at present, we shall state the substance of those passages, from the ancient writers, on which we ground our position. Cesar expressly says, that the Druids used to meet annually, on the borders of the territory of the Carnutes, which was considered the middle of all Gaul. Whoever examines the position of this territory, will immediately be convinced, that Cesar, in this passage, used the term *Gaul* in its limited and strict sense; since, if Aquitania and Belgic Gaul had been included, the territory of the Carnutes could not with any propriety have been deemed the centre of Gaul. With regard to England, Cesar, although he describes the Druids in Gaul so minutely, and mentions the received opinion, that their institutions had originated in Britain, and were, even in his time, taught there with more strictness and purity than in Gaul, yet gives not the least hint, that while he was in Britain,

Britain, he had either seen any Druids, or collected any information concerning them. We may therefore reasonably conclude, that Druidism was not known in those parts of Britain with which he was acquainted. Tacitus is the first, and, we believe, the only author, who takes notice of the existence of Druidism in Britain. Strabo, Pomponius Mela, Pliny,* and Solinus, all of whom speak of its existence in Gaul with astonishment and abhorrence, seem not to have heard of any part of Britain, in which it prevailed. The Romans appear to have advanced far into Wales before they met with it. Tacitus, in his annals, relates, that Suetonius Paulinus was opposed in his attempt on Mona, (Anglesey) by the army of the Britons; and that, after he had defeated them, he destroyed the sacred groves of the Druids. No mention is made of Druids in any other part of Britain; though, had Agricola collected any information respecting them, or met with any traces of their worship, during his expedition into Scotland, we cannot suppose that Tacitus would have neglected to notice them, in his life of that general. As the Druidical superstitions were so singular and so monstrous, we may consider ourselves justified in regarding the silence of the ancient writers respecting them as a sufficient proof that they did not exist in the countries which they describe.† If, therefore, we are to fix the boundaries of Druidism strictly according to the notices which these authors afford us, we must coincide in opinion with Mr Pinkerton, that 'there is no authority at all for Druids being known, beyond present North Wales on the north, and the river Caronne, the bound of the Celtæ in Gaul, on the south. A line drawn by the Severn in Britain and Seine in Gaul, forms the eastern bound, while the ocean forms the western.'‡

It is of some consequence to ascertain, by the same appeal to authorities, the nature of the places in which the Druids performed their religious ceremonies; since almost all Celtic writers, whenever authorities for the existence of Druidism in any

* Pliny, however, speaks of Britain as so entirely devoted to magic in his time, as to seem to have instructed the Persians; but his expressions are so vague and general, that they cannot relate to Druidism exclusively. Plin. Nat. Hist. lib. XXX. c. 1.

† Pliny and Suetonius relate that Tiberius forbade or abolished Druidism among the Gauls: and the former author considers mankind as greatly indebted to the Romans, for having put an end to such a monstrous and cruel superstition. Plin. lib. XXX. c. 1. Sueton. Tiberius, p. 544. edit. Schildii.

‡ Pinkerton's Enquiry, I. 406.

any country, which they deem Celtic, are not to be found, appeal to the stone monuments, which, they say, are to be discovered exclusively in countries formerly inhabited by the Celts. Or, on the other hand, assuming it as a fact, that all the *Celtæ* were Druidical, they regard these remains of antiquity as a sufficient indication that the country in which they are found was formerly the seat of a Celtic population. All the parts of this argument are assumed. But even if we allow the truth of both the circumstances upon which it is founded, viz. that all the *Celtæ* were Druidical, and that the Druids erected enormous stone temples or altars, still it by no means follows, that the countries in which these exist were formerly Druidical, or even Celtic. Stone monuments, nearly similar in form, and equal in magnitude to those which are said to be the most unequivocally Druidical, are found in countries into which, according to the opinion of all antiquarians, the Celts never penetrated. In many parts of the north of Germany, in the island of Zealand, and in Iceland, the stone monuments are similar in form, and seem to have been erected for the same purpose with those in Britain and France.* Indeed, it is well known that the courts of judicature, as well as the altars of the Gothic nations, were formed of huge stones; and consequently, it would be extremely difficult to distinguish Celtic monuments from those of Gothic origin, in countries where both had settled, even if it could be shown that the Celts did erect such monuments, for the purposes either of judicature or religion. Mr Davies, however, and those who contend for the Celtic origin of these remains, bring the question within much narrower limits. Instead of contending, generally, that these monuments are Celtic, without specifying for what particular purpose they were originally raised, they uniformly and positively attribute them to the Druids, and consider them as religious edifices. As most of these monuments are singular both for their size and structure, and totally unlike those that are to be found in nations as savage as the Britons were when discovered by the Romans, it is natural to expect that they would have been noticed, at least, by some of the ancient authors who treat of the Britons, especially when we reflect on the contrast which they must have formed with the miserable caves and huts of the natives. But the inference from the silence of ancient writers is decisive, on the supposition that these monuments are Druidical. *Cæsar*, *Lucan*, *Pliny*, and *Mela*, describe the rites and sacrifices of the Druids:† they particularly mention the sacred grove, and

* Keysler, p. 1,—12.

† *Cæsar de Bell. Gall. lib. VI. p. 115. Lucan, Pharsal. lib. I. l. 450,—462. Pliny, lib. XVI. c. 44. Mela, lib. III. c. 2.*

and the veneration that was paid to the mistletoe of the oak ; but are entirely silent respecting any temple or altar of stone. Indeed, the manner in which they speak of the Druidical grove, proves it to have been used for the same purpose as temples are : it was not only a place of assembly, but of sacrifice : in it were performed all their religious ceremonies. Tacitus, in his account of the destruction of the seat of Druidical superstition in the isle of Anglesey, informs us, that the groves sacred to their cruel rites were cut down.* As it evidently appears to have been the intention of Suetonius Paulinus to exterminate, if possible, the religion of the Druids, or at least to prevent them from continuing to offer up human victims ; certainly, if temples had formed any part of their institutions, he would have destroyed them, as well as cut down the groves. No mention, however, is made of them by Tacitus ; and if they did not exist in Anglesey, which is known to have been one of the most celebrated and solemn seats of Druidism, it is by no means probable that they were used in any other part of Britain. Besides, the very nature of their representations of the gods, and many parts of their ceremonies, would render unnecessary or useless any permanent or extensive buildings of stone. Maximus Tyrius informs us, that their only symbol of Jupiter was a tall oak ; † and Strabo describes the Druids as either burning their human victims surrounded with hay, or fastening them to trees, and then piercing them with arrows. The veneration which the religion of the Druids inspired for trees, especially for the oak, distinguished it from most others ; and as they both worshipped these trees, and immolated their victims upon them, it is not to be supposed that they would erect either temples or altars.

As all antiquarians are agreed, that a grove was indispensably necessary to the performance of the Druidical rites, we may conclude that Stonchenge, which is situated in a plain, where there is every reason to suppose very few trees ever grew, was not erected by the Druids, at least for the purposes of religion. With regard to many other stones, generally esteemed Druidical, some, such as the Logan or rocking stones, are evidently not the work of art ; and others are met with in countries so distant and dissimilar in their ancient manners and religion, that it seems most rational to ascribe them rather to the design or caprice of individuals, than to any common and permanent motive. This inference, at least, we are justified in drawing, that Druidism is not to be traced by the vestiges of its temples or altars, since
every

* Taciti Annal. lib. XIV. c. 30.

† Maximus Tyrius, Dissert. 38.

every authority and probability is against the supposition that the Druids made any use of stone buildings.

We now return to Mr Davies.—In page 173, we meet with the solution of a difficulty which has frequently perplexed us in perusing the writings of the modern Celts. It has always occurred to us, that the discriminating and generic qualities of the ancient Celts ought to have been almost entirely worn out, by the lapse of years, and the admixture with Gothic nations. We were, therefore, unable to account for the strongly marked character of almost all their modern productions. Whenever they touched on the subject of their descent, or antiquities, common sense appeared to desert them: They saw, and heard, and believed, what had no existence to any but themselves. Now, Mr Davies satisfactorily accounts for this strange phenomenon. There is an excavation, it seems, resembling a couch, on the very summit of Cader Idris, which was formerly the observatory of Idris, the giant and astronomer: 'Whoever rests a night in that seat, will be found in the morning, either dead, raving mad, or endued with supernatural genius.' We now see clearly by what means the modern Celts have preserved the intellectual character of their ancestors so entire: Whenever it is likely to become tainted with Gothic prejudice, a night's lodging in the couch of their great ancestor restores its original purity. We do not know whether any have been found dead in the chair of Idris; nor do we recollect to have heard any instance in which it has bestowed supernatural genius; yet, we believe that many have made trial of it, and have experienced its efficacy.

The theory of the formation of language has eluded the sagacity and learning of philosophers: but to Mr Davies, it is exceedingly simple and plain.

'We may, therefore, contemplate primitive man, as prompted, by the innate predilection of taste for social enjoyments, to detain, in his company, those living creatures, which had already received their being. To attract their notice, and conciliate their good will, he addressed himself to them, severally, by descriptive gestures. These efforts called forth the hitherto latent powers of his nature. The organs of speech moved in unison, and produced their corresponding articulations, unless where this exertion was saved by a simple repetition of the voices which they uttered: and thus it was, that the names of the familiar objects were acquired, and the solid ground-work of human language laid upon the basis of natural principles.' p. 377, 378.

'Let us put the case, that Adam the first man would inform his new-created bride of the *elephant*. The character, which he had already described in this animal, in the act of naming him, was probably his enormous bulk. This description he is now to repeat. Being an inexperienced orator, he would not trust entirely and exclusively to the powers

powers of his voice; his arms would be elevated, and spread abroad— in order to intimate the comprehension of gigantic space. This descriptive gesture would be aided by an immediate and spontaneous inflation of his cheeks; till his breath would find a passage through his nostrils. This natural description of a huge bulk would produce the sound *B—M*; and that sound, rendered articulate by the intervention of a vowel, would describe bulkiness,* and might be appropriated most happily to the *elephant*, or great beast.' p. 382, 383.

In a similar manner, Mr Davies explains the origin of the primitive names by which Adam expressed to Eve the horse, cow, sheep, and dove. *Soos*, the Hebrew name of the horse, is formed by a 'sudden hissing effusion of his breath.' An imitation of the voices of the cow and sheep gives them their respective names, *moo* and *ba*.

'He may have described the dove by fluttering his hand, so as to intimate the act of the wing in flight, and by repeating the syllable *toor toor*. He now walks forth, accompanied by the mother of mankind. The elephant presents his enormous bulk; the horse flies over the field; the *bem*, and the *voos*, are soon and readily distinguished. They are saluted by the *cow*, the *sheep*, and the *dove*; the *moo*, the *ba*, and the *toor*, are immediately recognized. How great must have been their joy, to find themselves in possession of a social language!' p. 383.

With this sublime passage we take our leave of Mr Davies, of whom most of our readers will probably think they have now heard more than enough.

ART. XII. *An Inquiry concerning the Nature of Heat, and the mode of its Communication.* By Benjamin Count of Rumford, V. P. R. S. &c. pp. 105. From Phil. Trans. for 1804. Part I.

THE labours of this indefatigable experimentalist have unquestionably rendered some service to science, by striking out new paths of observation which forced themselves upon his view, in the course of his random and miscellaneous trials. He has also evinced some sagacity, and much ingenuity, in applying his experiments to practical uses, insomuch that, although his theoretical conclusions are generally unhappy, his corollaries being derived from his observations of fact, and not from his speculative inferences, may generally be relied on, and have often contributed much assistance to the useful arts of common life. We profess to be of the daily increasing number of those who do not think very highly of Count Rumford's talents as a philosopher; and if our former prepossession required any confirmation

* Mr Davies may find a curious instance of the singular aptitude of this radical to express bulkiness, in the Measure for Measure of Shakespeare, Act II. Scene IV.

firmation (which it certainly did not), he has taken very great pains, in the elaborate performance now before us, to supply a variety of new proofs. This inquiry deserves our serious attention in many points of view: The exact coincidence of the only valuable and original matter which it contains, with the late curious and unexpected experiments of Mr Leslie, throws a suspicion upon one or other of these authors, which the Public have a right to see removed.

The merits of Count Rumford, too, have been so much a theme of conversation, and have had such an active influence in the fashionable world of science, that it is proper his pretensions should at length be sifted. But, above all, a paper filled with theoretical matter, abounding in pulses, vibrations, internal motions, and ethereal fluids, deserves to be exposed; the more, because these chimeras are mingled with a portion of induction, and have received the ill-deserved honour of a place in the *Philosophical Transactions*. We shall, therefore, enter pretty fully into the subject of this inquiry, and are not without hopes that both Count Rumford and the Public may be benefited by the discussion.

We shall consider this paper under its two obvious divisions—the original experiments which it contains, and the theories in which these are involved.

I. It is by no means our intention to argue against the originality of Count Rumford, or of Mr Leslie, from the circumstance of their coincidence in some minute particulars. Each of these writers begins with stating the necessity of previously describing his apparatus; and not only do the chief parts of the machinery tally, but we find them both hitting, at the outset, on the same important experiment, and then describing the effects of this occurrence in opening a wide field of new research, and the eagerness with which they entered this field. Such particulars, we are sensible, may constitute merely an accidental coincidence; and had the similarity of the two inquiries gone no farther, we certainly should not have made the remark. But if we were to state the opinion with which a review of the whole work has impressed us, we should say that Count Rumford had borrowed Mr Leslie's leading discovery, without completely understanding its nature and extent; that he had pursued it imperfectly; and so mixed it up with error and fanciful theory, as to disfigure it, and almost prevent one from recognizing the property. The same inference will probably occur to such of our readers as attend to the following details; and we hope to make it still more obvious in our review of Mr Leslie's work.

The apparatus at first employed by Count Rumford, consisted of several very delicate and accurate mercurial thermometers, with

with long cylindrical bulbs, inserted in cylinders of steel or brass, to the whole extent of the bulb. These cylinders were filled with hot water, and coated on the outside with various thin substances. The cooling of the water was observed by the sinking of the mercury, and noted down at different times. The ends of the cylinders were sometimes defended by various bad conductors of heat, as eider-down, varnish, &c. ; and first, it was ascertained by various trials, that the descent of the thermometer through any given small number of degrees, was performed in equal times, at all heights and all temperatures of the atmosphere, provided the heights were equally above the temperature of the atmosphere. The interval he generally chose, was that between the fiftieth and the fortieth of Fahrenheit above the temperature of the atmosphere. Although he generally was able to note the descent at small intervals, yet, for the sake of continuity, our author observes that he ‘endeavoured to investigate the law of the cooling of hot bodies in a cold fluid medium,’ and ‘found reason to conclude that a logarithmic will have its ordinates proportional to the degrees of the thermometer, the abscissa being taken proportional to the times.’ He had, indeed, good reason to draw this conclusion ; for Sir Isaac Newton and Brook Taylor, luckily for Count Rumford, long ago investigated this very law, and recorded the result in the earlier numbers of the *Philosophical Transactions*, where our author probably found it, and thus may be said to have discovered it. This, however, was the general rationale of the experiments first performed : we proceed to the results of the trials themselves.

One of the cylinders, prepared and filled as above, being coated with thin Irish linen, and the other exposed to the air, bright and polished, without any coating, the times of cooling were repeatedly noted. The covered vessel cooled from 94° to 84° in $36\frac{1}{2}$ minutes—the uncovered in 55 minutes. Both having at least cooled nearly to the heat of the atmosphere, they were removed into a warmer room, and the covered instrument received heat considerably faster than the naked one. In case the linen might produce this effect by preventing the adhesion of the air to the vessel, the experiment was repeated with coatings of glue and of spirit varnish, with the same results ; only, that beyond a certain number of coatings the passage of heat was not accelerated. For the coating of varnish, black and white size paint were substituted, and then the tarnish of a candle-flame, with the same effect. Our author computes, by an easy calculation, the quantity of heat which passes through the sides of the instrument, that is, through the parts compared together ;

and, reducing the whole of the results to one standard, it appears that the velocity with which the heat passed through the polished surface, is to the velocity with which it passed through the same surface covered with four coats of spirit varnish, as 4,566 to 10,000, (for this is evidently the proportion, though our author reverses it by mistake in p. 101.); and that the velocity of its passage through the plain metal is to the velocity of its passage through the metal tarnished with smoke, as 5,654 to 10,000. The coating of smoke which produces so great a difference cannot possibly be more than $\frac{1}{1000}$ of an inch in thickness.

Now, we are forcibly struck, we acknowledge, with the exact coincidence between all these curious experiments, and those of Mr Leslie, as detailed in the sixteenth chapter of his Inquiry into the Nature and Propagation of Heat. The same series of observations upon the cooling of hot water through plain and coated vessels—the same sort of calculations, though certainly much better instituted—the same observation of an uniform increase of cooling or heating, by coats of isinglass and lampblack, form the prominent features of both inductions. Mr Leslie's experiments, however, are more various and masterly; his mathematical illustrations and proofs are much more skilful; and, though we are not prepared, in this place, to examine the truth of his remote theoretical deductions, we are satisfied with the accuracy of his intermediate results, which far exceed those of Count Rumford in their number and generality. The next part of the inquiry now before us, is, however, still more striking, from its coincidence with Mr Leslie, to whom the author has not been able to conceal his obligations, although he has certainly abstained from acknowledging them.

He commences his next course of experiments with stating, that he found it necessary

—‘to contrive an instrument for measuring or rather for discovering those very small changes of temperature in bodies, which are occasioned by the radiations of other neighbouring bodies which happen to be at a higher or at a lower temperature.’ p. 101.

This, too, is the precise object of Mr Leslie's *differential thermometer*; and, how far the same end has been attained by similar means in the two cases, let the following most singular passage determine.

‘This instrument’ (says Count Rumford) ‘which I shall take the liberty to call a *thermoscope*, is very simple in its construction. Like the *hygrometer* of Mr Leslie (as he has chosen to call his instrument) it is composed of two glass balls, attached to the two ends of a bent glass tube; but the balls, instead of being near together, are placed at a considerable distance from each other; and the tube which connects them,

them, instead of being bent in its middle, and its two extremities turned upwards, is quite straight in the middle; and, its two extremities, to which its two balls are attached, are turned perpendicularly upwards, so as to form each a right angle with the middle part of the tube, which remains in a horizontal position.'

'At one of the elbows of this tube' (continues our author) 'there is inserted a short tube of nearly the same diameter, by means of which a very small quantity of spirit of wine, tinged of a red colour, is introduced into the instrument; and after this is done, the end of this short tube (which is only about an inch long) is sealed hermetically; and all communication is cut off between the air in the balls of the instrument and in its tube, and the external air of the atmosphere.'

He then goes on to explain the application of this instrument, by passing a portion of the liquid into the horizontal tube, and allowing it to remain at the middle joint, in which position it must continue, while the temperature of the air in the balls, and consequently their elasticity, is equal. But if bodies radiating unequal degrees of heat be exposed to the balls, or if one ball be exposed to a hot body, and the other defended from it, then the liquor will recede from the ball exposed to the greatest elevation of temperature; and if a cold body be applied to one ball, the other being defended from its influence, the liquor will move towards this ball, so exposed. All this he illustrates by a figure, and by various explanations. We have described it sufficiently, to prove that the *thermoscope* is exactly Mr Leslie's elegant instrument, denominated by him, not a hygrometer, as Count Rumford is pleased to say, but a *differential thermometer*. According to the Count's own statement, he borrows the whole idea from that gentleman; yet, with an ardour for discoveries not quite scientific, he talks of it as his own contrivance, and, with his accustomed love of nomenclature, he gives it a new appellation. The changes which he makes upon the structure, are utterly unconnected with the theory of the instrument; but it must be remarked that they impede the performance of the experiment. The figure of the tube is both incommodious, and less adapted to the easy passage of the fluids; while the mode of introducing the liquid by a separate tube is extremely clumsy, and in every way worse contrived than Mr Leslie's method. The use and operation, as well as the whole that is worth any thing in the Count's thermoscope, is precisely Mr Leslie's, to which he thinks fit to say, he has invented one 'like.' Indeed, Mr Leslie had published a description of his beautiful contrivance in several parts of Nicolson's Journal for the year 1800; and every chemist was acquainted both with that general form of the instrument, and with its application to the purposes of a photometer, long before the year 1803, when Count Rumford's

experiments were made. As to what regards Mr Leslie's peculiar claims to priority, it is sufficient to remark, in justice to him, that the whole of his book was printed before the Count's paper was communicated to the Royal Society; that the experiments were performed in 1801, whereas the Count only began to operate in 1803; and that, in 1802, Mr Leslie's first chapters were all printed off. These circumstances, which are partly stated in the preface, before the present part of the Philosophical Transactions appeared, and partly appear from comparing the dates of the two works, throw the whole suspicion, in our mind, upon Count Rumford, and render it incumbent on Mr Leslie only to bring forward such facts as he may be in possession of, to show how the knowledge of his experiments may have got abroad and reached Count Rumford while his work was preparing for publication. We shall dismiss this part of the subject with expressing our high admiration of that very important and elegant modification of the air-thermometer which Mr Leslie, not Count Rumford, has happily contrived; an improvement calculated to introduce as much accuracy, and to open as wide a field of discovery in the science of heat, as the combination of glasses did in the sciences of astronomy and optics. By it, we are enabled to weigh, with the utmost nicety, all proportions of caloric, and to estimate, as correctly as by a delicate balance, every variation of temperature. In reviewing the application of this happy invention to the purposes of investigation, as detailed by the discoverer himself, we shall have an opportunity of doing justice to its merits. At present we hasten to sketch the uses which the borrower of the idea has made of it, and in which we shall again be satisfied how unwilling he has been to deviate from his original.

The mode in which Count Rumford operated with what he calls *his thermoscope*, was by exposing it to brass cylinders like those formerly described, but fixed horizontally so as to present their circular end to the ball of the instrument. After ascertaining the exactness of the instrument, by finding that the liquor remained stationary when two cylinders uncoated and filled with the same hot water were placed at equal distances from the balls, but that a slight variation in the temperature or distance of either cylinder caused the liquor in the tube to move, our author proceeded to verify by this delicate test his former experiments on slow cooling. He found that the circular end of one cylinder being coated with candle smoke, while the other remained clear; the bubble instantly receded from the ball exposed to the former, and did not regain its equilibrium until that cylinder had been removed to four times the distance of the other. He also found that

that linen, glue, spirit-varnish and paint, produced the same effects in the experiments of the thermoscope as they had formerly done in those of the mercurial thermometer. He then repeated his former experiments of slow cooling with vessels of lead and tinned iron, and with the brass cylinders coated with gold and silver leaf. The results entitled him to believe that no difference whatever was produced by any change of the metal containing the radiating body. Our author now resumed his trials with the thermoscope, and, substituting a cold for a hot body in the cylinder, found that the liquor in the tube was attracted towards the bulb which was near the cold cylinder, in proportion to its degree of cold and to its proximity to the bulb; and that if two cylinders equally cold, but one coated with candle smoke, were presented to the balls, at equal distances, the liquor moved towards the blackened cylinder. One of the cylinders being coated with animal membrane was found to radiate both heat and cold (according to our author's theory of frigorific radiation) five times more copiously than the naked cylinder. He also found that if one ball remains at its natural temperature, while to the other there are presented on opposite sides two bodies, the one as much above that temperature as the other is below it, no change whatever takes place in the position of the liquid. The same result follows from varying this experiment by coating both the cylinders with candle-smoke. Previous to some ingenious speculations on the practical application of the foregoing facts, we are presented with an experiment to prove that both calorific and frigorific radiation is much more copious from animal membrane of a black colour, than of any other hue. As a specimen of the author's ingenuity in applying his facts, we shall extract the following passage.

'It is evident, that the greater the power is which an animal possesses of *throwing off* heat from the surface of his body, independently of that which the surrounding air takes off, the less will his temperature be affected by the occasional changes of temperature which take place in the air, and the less will he be oppressed by the intense heats of hot climates.

'It is well known that *negroes* and people of colour support the heats of tropical climates much better than white people. Is it not probable that their *colour* may enable them to throw off calorific rays with great facility and in great abundance, and that it is to this circumstance they owe the advantage they possess over white people in supporting heat? And even should it be true, that bodies are cooled, not in consequence of the rays they emit, but by the action of those frigorific rays they receive from other colder bodies (which I much suspect to be the case), yet as it has been found by experiment, that those bodies which emit calorific rays in the greatest abundance are also most affect-

ed by the frigorific rays of colder bodies, it is evident that, in a very hot country, where the air and all other surrounding bodies are but very little colder than the surface of the skin, those who by their colour are prepared and disposed to be cooled with the greatest facility, will be the least likely to be oppressed by the accumulation of the heat generated in them by respiration, or of that excited by the sun's rays.' p. 129.

We have here announced to us, not merely the existence, but the operation of cold, and, it would appear, the banishment of heat. But the passage is full of contradictions. For, do not all the experiments formerly analysed prove that the existence of heat and cold is uniformly correlative—that the quantity of the one is inversely as the quantity of the other—and that when a certain portion of heat has radiated from a body, it ceases to give out any more? But can it be made to consist with all this, that bodies can only be cooled by absorbing cold, and, consequently, that they can only be heated by absorbing heat? If these two substances have each a real and separate existence, how should it happen that equal quantities of them, when mixed, exactly go for nothing, instead of forming a third body compounded of the other two? Besides, let it be remembered, that we have the very same evidence to prove the radiation of heat from the thermoscope to the cold body, that we have to prove the radiation of heat from the hot body to the thermoscope. Consequently, when the negro's skin is exposed to the atmosphere of tropical climates, its colour and consistency operates in heating or in cooling him more rapidly than a white man, precisely as the atmosphere is hotter or colder than his body. If the air is cold, then he is cooler than other men; but if, which is the case to be explained, the air is hot, then he is much hotter than other men. It is in vain to say that he radiates heat, and receives cold more abundantly. The experiments of the thermoscope prove, that as long as he is at all cooler than the climate, he must be receiving heat more copiously than a white man; and if he has any frigorific particles to radiate (as he must, according to Count Rumford's theory coupled with his facts) when the air is hotter, he gives out these much more copiously than a white man.

The ingenuity of the following passage is rather pleasing, though it is liable to some of the foregoing objections.

'Several of the savage tribes which inhabit very cold countries besmear their skins with oil; which gives them a shining appearance. The rays of light are reflected copiously from the surface of their bodies. May not the frigorific rays which arrive at the surface of their skin, be also reflected by the highly polished surface of the oil with which it is covered.'

‘ If that should be the case, instead of despising these poor creatures for their attachment to a useless and loathsome habit, we should be disposed to admire their ingenuity, or rather to admire and adore the goodness of their invisible Guardian and Instructor, who teaches them to like and to practise what he knows to be useful to them.

‘ The Hottentots besmear themselves, and cover their bodies in a manner still more disgusting. They think themselves *fine* when they are besmeared and dressed out according to the loathsome custom of their country. But who knows whether they may not in fact be *more comfortable*, and better able to support the excessive heats to which they are exposed? From several experiments which I made with a view to elucidate this point, (of which an account will be given to this Society at some future period), I have been induced to conclude, that the Hottentots derive advantages from that practice exactly similar to those which negroes derive from their black colour.

‘ It cannot surely be supposed that I could ever think of recommending seriously to polished nations the filthy practices of these savages. This is very far indeed from being my intention: For I have ever considered cleanliness as being so indispensably necessary to comfort and happiness, that we can have no real enjoyment without it: But still I think, that a knowledge of the physical advantages which those savages derive from such practices, may enable us to acquire the same advantages by employing more elegant means. A knowledge of the manner in which heat and cold are excited, would enable us to take measures for these important purposes with perfect certainty: In the mean time, we may derive much useful information by a careful examination of the phenomena which occasionally fall under our observation.

‘ If it be true, that the black colour of a negro, by rendering him more sensible to the few frigorific rays which are to be found in a very hot country, enables him to support the great heats of the tropical climates without inconvenience, it might be asked, how it happens that he is able to support, naked, the direct rays of a burning sun?

‘ Those who have seen negroes exposed naked to the sun’s rays in hot countries, must have observed that their skins *in that situation* are always very shining. An oil exudes from their skin, which gives it that shining appearance; and the polished surface of that oil reflects the sun’s calorific rays.

‘ If the heat be very intense, sweat makes its appearance at the surface of the skin. This watery fluid not only reflects very powerfully the calorific rays from the sun, which fall on its polished surface, but also by its evaporation generates cold.

‘ When the sun is gone down, the sweat disappears; the oil at the surface of the skin retires inwards; and the skin is left in a state very favourable to the admission of those feeble frigorific rays which arrive from the neighbouring objects.’ p. 132.

It is scarcely necessary to remark how completely all this explanation is at variance with the speculative observations last

quoted. There we were taught to consider cooling as the effect only of absorbing frigorific particles; now, the exclusion of heat is the cause of comfort to the negro. Formerly, we were told, that he only benefited from his colour by absorbing an extraordinary portion of cold; now, he is provided with a coat of grease, which must exclude both heat and cold. These fanciful remarks are followed by some experiments to prove that the cooling of hot bodies depends on the absorption of frigorific rays. They are inconclusive; because they either prove that the cooling body absorbs heat, or that the cooled body absorbs cold; and in every instance the effects are exactly proportional, and the terms of the explanation convertible. The author is reduced, at every step, to this dilemma; either cold exists without heat, which must follow if you maintain that bodies are cooled only by receiving cold, and that they are heated only by giving out cold; or heat can never be emitted without an equal absorption of cold, nor cold emitted without an equal absorption of heat. If you chuse the latter position, what sort of separately existing bodies must those be which are so mutually dependent on each other? If you take the former, are there not at least as many proofs adducible of the existence of heat, as of the existence of cold?

Before leaving the experimental branch of this subject, we shall notice the most original of all Count Rumford's experiments—those which he made to prove the great effect of polished surfaces in reflecting heat. They do not indeed demonstrate any new proposition, but there is somewhat in the results of them, and in his way of stating others, which cannot fail to surprise us. A drop of water rolls about on a red-hot iron without evaporation, because its surface becomes so highly polished as to reflect all the heat. If the heat be less, the water penetrates the pores of the oxidated iron, and, losing its polish, is evaporated. If the metal be less oxidable, the water remains unevaporated even at a low temperature. If the inside of a silver spoon be covered with candle smoke, and a drop of water be put into it, you may hold the spoon over a lamp until it becomes violently heated, without affecting the water, which is scarcely warmed by the heat: at last, the soot adhering to the drop, facilitates the transmission of heat, and the water gradually evaporates. A drop may, in like manner, be introduced into the centre of a lamp flame, without being affected, until it receives heat by the conducting power of the body which holds it. This last experiment, by the way, appears to be explicable on the commonly received doctrine, that the centre of a flame, having no access to oxygenous gas, is not in a state of combustion at all, while the surface

of the vapour, being exposed to the action of the air, is burning rapidly.

II. We shall now enter more fully into some of the general inferences deduced by Count Rumford from the foregoing experiments. We have already hinted at several objections to one of his theories; we shall presently find, however, that the work teems with many absurdities still more glaring.

In expounding his peculiar theory of heat, our author begins by remarking, that there is no such thing as rest in the universe—that all the bodies of which we have any knowledge are in a state of motion—and that probably the particles of those bodies are also moving among themselves. He then supposes the case of a perfectly elastic bell being struck while surrounded by other elastic bodies in an elastic medium, and conceives that if the vibrations of the bell were more rapid than those of the other bodies, an equilibrium would take place; that if all the bodies were in equal vibration, no effect would be produced by their mutual actions; and that if the bell's vibrations were slower, they would gradually be increased. This he thinks is a case exactly similar to that of calorific and frigorific radiation; and as we, on the other hand, are convinced that a better exposition of his doctrine of vibrations could not be imagined, than the one presented by pursuing this illustration, and comparing it with our author's inference, we shall give his application in his own words.

'The rapid undulations occasioned in the surrounding ethereal fluid by the swift vibrations of the hot body, will act as calorific rays on the neighbouring colder solid bodies; and the slower undulations occasioned by the vibrations of those colder bodies will act as frigorific rays on the hot body; and these reciprocal actions will continue, but with decreasing intensity, till the hot body and those colder bodies which surround it shall, in consequence of these actions, have become of the same temperature, or until their vibrations have become isochronous.

'According to this hypothesis,' he adds, '*cold* can with no more propriety be considered as the absence of *heat*, than a low or a grave sound can be considered as the absence of a higher or more acute note; and the admission of rays which generate cold, involves no absurdity, and creates no confusion of ideas.' p. 157.

Nothing, in our apprehension, could have more demonstratively shown the fallacy of the author's whole theory than this illustration and application. If frigorific rays are to be considered as existing substances, of a nature essentially different from calorific rays, what can be less applicable than the case of vibrations differing from other vibrations only in degree of strength? A frigorific ray can never, according to Count Rumford's theory, produce any of the effects of a calorific ray, modify either as
you

you please. But a slow undulation resembles a quick one in every particular, and produces all the same effects in a smaller degree. A frigorific ray can never become calorific by any change: A slow undulation becomes a quick one by the easiest transition imaginable. If words have any meaning, it is impossible to draw the line between quick and slow undulations; for these terms are merely expressions of a mutual relation. But surely nothing can be more definite than the boundary between positive heat and positive cold, according to our author's doctrine. Suppose a quickly vibrating body is brought into the neighbourhood of a quiescent one, the vibrations of the former will be diminished. If it be brought into the neighbourhood of a body vibrating slower than itself, its vibrations will still be diminished, but not so much as if the second body had no motion at all. But will a hot body be more cooled by the neighbourhood of a body radiating neither heat nor cold, than by the neighbourhood of one radiating cold? The proposition is a contradiction in terms.

It also deserves to be considered how Count Rumford introduces an ethereal fluid into his theory, silently, and without giving his readers any warning of such a postulate. It is true that, without it, he cannot proceed a step; yet surely so extravagant a demand should have been explicitly stated, instead of being tacitly assumed. But it appears to us, that the ether never was introduced with less felicity. When the existence of certain substances has been admitted; when, for example, Sir Isaac Newton proceeded upon the position that the rays of light are solid particles of matter, acting on and affected by other parts of matter (a position which he had himself confirmed by his discoveries), it was then sufficiently consistent to consider how such material particles would affect, or be affected by, a surrounding medium like the subtle ether, supposing such a fluid to exist. But, in the present case, the whole question relates to *existence*; the matter in dispute is the reality of heat or of cold, or of both, or of neither. To settle this point, our author fancies an ether; he introduces a nonentity as a step in his reasonings upon the existence of other bodies. We are discussing the subject, whether caloric is a substance? Count Rumford tells us he can settle that question; and he begins his decision by saying, 'for *the ether*.' What ether? He cannot tell. But suppose an ether.—Why not suppose a caloric—the point at issue? and then we are at least spared the labour of all his prolix and useless argumentation.

Let us, however, admit this important preliminary, and see whether the clumsy theory has even the paltry merit of explaining the phenomena: On the contrary, it is hardly reconcilable to a single fact. We shall only take a few specimens of its powers in this way.

If heat consists in the internal motions of the particles of bodies, the question immediately occurs, how do bodies, by any modifications of such motions, change their state from solidity to fluidity? and how does the idea of motion accommodate itself to the fact of heat being absorbed in fusion, afterwards to be given out again upon the body resuming the solid form. Count Rumford explains this in the following strange manner. We chuse to quote his own words, lest our readers should be disposed to disbelieve any abridgement which imputed such opinions to an author of his note.

‘ Whatever may be the figures of the orbits which the particles of a liquid describe, the mean distances of these particles from each other remain the same as when they constituted a solid, as appears by the small change of specific gravity which takes place when a solid is melted and becomes a liquid; and, on a supposition that their motions are regulated by the same laws which regulate the solar system, it is evident that the additional motion they must necessarily acquire, in order to their taking the fluid form, cannot be lost, but must continue to reside in the liquid, and must again make its appearance when the liquid changes its form and becomes a solid.

‘ It is well known,’ he continues, ‘ that a certain quantity of *heat* is requisite to melt a solid; which quantity disappears or remains *latent* in the liquid produced by that process; and that the same quantity of heat reappears when this fluid is congealed and becomes a solid body.’ p. 160.

A certain quantity of motion absorbed, remaining latent, and then after an interval reappearing! What is absorbed, or latent, or quiescent *motion*? Is it not rest? and what power can put particles into an intermitting motion, that is, a motion to be suspended, and then to be revived again, without any new impulse? Have we not here only a choice of impossibilities and contradictions—either that *motion* is something which may be concealed and then developed, *i. e.* may remain at *rest*—or that, after being annihilated, it may be regenerated, without any new impulse, *i. e.* may be produced anew without a cause? Indeed, the confusion of ideas which pervades the whole of this explanation, is not only like, it is exactly the same, with that which Swift has ridiculed in his picture of the Laputan projector, who wasted his life in extracting sun-beams from cucumbers, in order to preserve the rays for use during winter; and with a still more palpable absurdity that has become matter of common ridicule, the cold which froze up men’s words, until, at the approach of spring, the speeches made during winter began to thaw of themselves.

But it is not only in the more abstruse parts of the theory of heat that Count Rumford’s explanation so miserably fails,—it is equally inadequate to account for the most ordinary appearances, although,

although, here, its discrepancy with the facts may not at first sight appear so palpable. Let us see how it is reconciled with the expansive power of caloric.

So long, according to our author, as the internal and incessant motions among the particles of bodies remain the same, no sensible alteration can take place in their qualities or appearance. But when the radiations of hotter bodies, that is, the impulses of particles moving more rapidly, communicate to the former substances a greater degree of internal motion, their particles must vibrate more rapidly; the arches of their undulations must be elongated, and the visible magnitude of the whole masses increased. In like manner, if the bodies are cooled, that is, if their motions are diminished, the undulations will be contracted, and the volume of the masses diminished.

Now, surely, it seems obvious to answer, that if the increase of volume were produced entirely by an augmented vibration, it would be much easier than we actually find it, to prevent, by external pressure, the expansion of a heated body. If the force were exerted not steadily in one direction, from the centre to the surface of the body, but alternately and equally backwards and forwards, a very little compression would suffice to stop this vibration. Besides, the appearance of a body vibrating in this manner, however rapidly, would certainly be very different from that of a body gradually and steadily expanded in all its dimensions by heat. But two considerations are of themselves quite sufficient to overthrow the whole of this reasoning.

In the *first* place, it is admitted that heat expands bodies equally in all directions. But vibratory motions can take place only in the directions determined by the initial impulses; the wave must always be in the plane of the line in which the first stroke is communicated to the undulating body. According, therefore, as heat is radiated in one line or another, we might expect to see the dimensions of the heated body expanded in one direction or another. It would always be possible, too, by opposing opposite forces, to counteract the effects of those impulses; that is to say, it would be possible to stop the vibrations by opposite radiation, or to prevent the body from expanding by the application of more heat. We do not here stop to inquire how this theory may be accommodated to the anomalous effects of cold in expanding certain bodies, as water and ice.

Secondly, If we attend to the nature of elasticity, and the laws of percussion, we shall be completely satisfied that all this theory of motion is utterly unfounded; and the argument which we are now about to suggest, is submitted as one that must be decisive even with Count Rumford himself. Suppose a radiation to accelerate

lerate the vibratory motion of a central particle, and of course to propagate its impulse through the line of successive particles, at the extremity of which this one first struck is situated; let us consider what must necessarily take place. The whole row of particles are actuated by an impulse. But suppose, first, that only one impulse is communicated; the particles being all elastic by the hypothesis, the motion visibly affects none but the last. If a number of ivory or glass balls are suspended by separate threads in a straight line, and apparently touching each other, and the ball at one end is made to vibrate against the one next in succession, the whole line will remain unmoved, except the ball at the other extremity, which will fly off with the whole impulse. This is a well known consequence of the common laws of percussion, and the experiment is perfectly familiar to every one. If, instead of one impulse, a constant succession of impulses be communicated to the first ball, or to each of the others; still the same consequence follows, only the last ball flies off with greater force, viz. with the accumulated force of all the impulses —while the other balls remain at rest as before. Precisely the same consequence must follow, if the number of the balls is indefinitely increased, their diameters diminished, and their neutral contact rendered more close. We have now exactly the line of particles first supposed in the heated body; and the radiation must produce the same effect, according to Count Rumford, as the percussion of the balls. Therefore, the whole particles, instead of vibrating, will remain at rest, and the last particle alone fly off. This must happen in every row of particles in the body; consequently, the application of heat, instead of expanding the dimensions of the body, will only cause its anterior surface to split and fly off in splinters, in a direction determined by the mode of applying the heat. If the heat is radiated from one side only, the opposite surface will fly off. If it is radiated from two contiguous sides, the extreme parts will fly off diagonally. If it is radiated from the centre, both surfaces will splinter; and if it is equally radiated from opposite sides, the whole body will be shaken, but no other change whatever will be produced. So consonant to fact is this theory of vibration and incessant motion!

We here take leave of Count Rumford's speculations upon the nature of heat. After the ample discussion we have bestowed upon them, it would be very unnecessary to recapitulate the manifold objections to which they are obviously liable. We shall, therefore, only express an earnest wish that this ingenious and persevering observer would leave the amusement of framing hypotheses to inferior men, who cannot substantially assist the progress of inductive philosophy, and whose errors or fancies can have no detrimental consequences to science. That we do not
value,

value, without some reason, Count Rumford's talents as an experimentalist, and as a reasoner on a confined scale, from the proximate doctrines of his experiments to the useful arts, may be gathered partly from the illustrations formerly quoted, and partly from the practical applications with which his paper concludes. These are indeed, in this instance, the applications of discoveries not his own; but they shew as much useful ingenuity, as if he had himself contrived the instruments and performed the fundamental experiments, of which we have been constrained to deny him the merit. We shall now conclude with a short abstract of those practical remarks.

The brighter the polish of vessels designed to keep meat, water, &c. hot, so much the better will they answer this purpose. On the other hand, vessels used for cooling hot bodies should be made rough, and covered with some paint or varnish. Vessels used for heating substances, should be kept bright on all sides, except that exposed to the fire, which should be coated with lamp-smoke or black. Wood is better than metal for cooling-vessels, as the flats in which brewers cool their wort; and thick wood is preferable to thin. Tubes used for heating rooms, by steam or hot air, should be painted or coated on the outside; but those which are employed for the purpose of conveying steam or hot air from place to place, should be kept polished, or wrapt up with warm covering. Thus, the cylinders and principal tubes of steam-engines should be well covered and coated with polished brass. Black fruit walls, though hotter in the day, are colder in the night than others. These vicissitudes may be less favourable to trees than is generally supposed. Black clothes are in the same predicament; and in a cold climate no colour is more chilling. Clothes, whose surface is polished, are by much the coolest in summer, and warmest in winter. Fur garments should always be worn (in winter) with the hair outwards. The change of colour in winter, from dark to white, of some delicate animals in cold climates, is extremely favourable to their warmth; and some animals inhabiting climates where they are exposed alternately to excessive cold and violent sunshine are always white. Our author concludes by stating as a query, whether the practice, prevalent in hot climates, of sleeping on the roofs of houses, may not be advantageous, by exposing the body to those frigorific rays which he imagines are always arriving on the earth from every part of the heavens.

Before concluding this article, we must be permitted to add to the censures already passed on Count Rumford's paper, by one remark. We allude to the want of arrangement; the prolixity and repetition; the perpetual digressions and deviations either into different topics, or into general observations, which form distinguishing

stinguishing features of our author's style of writing. His general remarks, too, are far from being either original or important, and serve rather to diminish than to increase our respect for the author's philosophical powers. Style and diction are, in matters of pure science, very subordinate considerations; nor have we any criticism to make on the Count's manner of expressing himself. But we cannot avoid observing, that he is rather too fond of self-gratulation; of bestowing epithets upon himself and his experiments; of indulging in well-turned compliments to his success and dexterity. To find specimens of this strange practice, it is only necessary to open his volume. He never mentions or refers to one of his experiments, without calling it *most interesting* or *highly instructive*—or *singularly beautiful*—or at once *simple and decisive*. All his inquiries are '*extremely important*,' or '*valuable and new*,' or '*striking and conclusive*,' or '*calculated to elucidate what was enveloped in obscurity*.' We do not at all exaggerate, when we say, that this routine of complimentary epithets is so unvaried, as to become a kind of ordinary nomenclature, and so indiscriminate as frequently to become somewhat ludicrous. The simplest experiment or remark, when touched by the finger of Count Rumford, is covered with brilliancy, swelled into grandeur, and branched into fruitful consequences. In the present publication, the effect of such a style is heightened by the constant recurrence of the remarks formerly offered on the *property* of the discoveries. The grave and repeated encomiums which he bestows on the instrument, which is nothing when called an hygrometer, and used by the original inventor, but suddenly becomes every thing that is valuable and powerful, when denominated a thermoscope, and invented over again by Count Rumford—are rather too ridiculous not to discompose the gravity of a scientific inquiry. The constant expression of *surprise* and *self-satisfaction* at the result of processes which others had previously contrived and performed, belongs to the same class of *figures*, which we heartily wish had not been so *very ill-placed* in this elaborate production.

ART. XII. *An Account of a curious Phenomenon observed in the Glaciers of Chamouny; together with some occasional Observations concerning the Propagation of Heat in Fluids.* By Benjamin Count of Rumford. V. P. R. &c. From Phil. Trans. Part I. for 1804.

IN passing over the region of the Glaciers of Chamouny, denominated *Mer de Glace*, Count Rumford and Mr Pictet of Geneva observed a cylindrical pit, seven inches in diameter, and
four

four feet deep, in a vast mass of solid ice. The cavity was filled with water, its sides were polished, and its bottom was hemispherical and definite. It was a little inclined to the plane of the horizon; and the travellers learned from their guides that such pits are extremely common all over the lower parts of the Glaciers; that they are formed during summer, gradually increase during the summer months, and disappear in winter, the water being then frozen up.

The explanation which Count Rumford suggests of this singular appearance, is very ingenious, and proceeds upon his peculiar theory of the non-conducting nature of water. The hot winds, he conceives, which pass continually over the surface of the ice during summer, communicate a certain degree of heat to the surface of the water in the pit. The heated particles of the water, formerly ice cold, are increased in specific gravity, and descend through the colder particles of the column till they reach the bottom, where they melt the ice, and regain their former temperature. A succession of descending particles is thus maintained, and heat is conveyed from the surface to the bottom of the pit, without heating either the sides or the column of water.

Now, to this ingenious explanation, a variety of objections occur, in our apprehension altogether insuperable.

In the first place, no account whatever is given, or pretended to be given, of the circular form and inclined direction of the pits. We are left to guess how, in the whole *Mer de Glace*, a few insulated spots alone should be thus singularly affected by the hot winds, while all the rest of the ice remains unmelted; why these spots should be of a circular form; and why, instead of the pits being vertical, as they undoubtedly ought to be according to Count Rumford's explanation, by the *descent* of heavy particles, they are actually inclined at a considerable angle to the plane of the horizon.

Next, it must be observed, that our author, partly to get rid of the former objection, and partly for another reason, supposes the pit to be already formed and filled with water to a certain depth, before his explanation commences. He then shows how the heated particles would sink and thaw the bottom, upon the supposition, be it always remembered, that a particle of water cannot directly communicate heat to another particle; for it is reasoning in a circle, to assume the phenomenon in question as a new proof of the theory here alluded to. But, to pass over this fallacy, and admitting that theory—if the commencement of the pit is considered, we cannot easily perceive how the sinking of the heated particles is to have a beginning. Suppose that, from any cause, a circular *lamina* of ice is melted—it appears
inconceivable

inconceivable that the power of the hot wind over the ice-cold water, thus formed, should be greater than the power of all the mass of ice by which this slender film of freezing water is surrounded on every other side. But admitting that a sufficient quantity of water is formed, we do not see how it could melt the ice in a cylindrical tube. The *lamina* of heated water always descending from the surface, would melt the sides as well as the bottom of the pit; by degrees, the dimensions of the hole would enlarge on every hand into a conical form; and the descending film would be so spread when it reached the bottom, as not to have any effect whatever on the ice.

Indeed, it is scarcely necessary to observe, that there is in this appearance a great deal of inexplicable matter, but not more than in a thousand others which pass daily before our eyes unheeded. The form of every crack and fissure in the earth, of every rocky fragment broken from a mountain, of every cloud in the heavens, and of every pool of water on the ground—all these things are as difficult to be accounted for as the water pits in the *Mer de Glace*, except only in the alleged resemblance of those pits to each other, of which Count Rumford has no knowledge from observation. We are in general satisfied with saying, ‘Those things are accidental;’ by which we mean, if our words have any signification, that we are ignorant of the causes which have produced and modified them; and that on a cursory inspection, we perceive so little analogy between such appearances and other facts already classified, that we think them unworthy of farther examination. Unless Count Rumford has some new and more solid explanation to bestow on the phenomenon just now described, we must rank it in the same most numerous and mortifying collection of natural occurrences.

The remainder of this short paper is occupied with detached remarks on the objections which have been urged against his theory of the non-conducting power of fluids. The tone of these remarks strikes us as somewhat unbecoming. It is not very decorous in one who has advanced a doctrine which overthrows all former articles of belief upon the subject of heat, to betray marks of indignation and impatience at being answered by new and contradictory experiments; and to evince a sort of supercilious contempt for all who venture to maintain the old opinions. There is an aristocracy, as it were, in the Count’s manner of treating his adversaries, which we do not very well understand, and which is little suited to the republican constitution of the scientific world—the only region where we hope to see the column resist, for ages, all attempts at giving it a Corinthian capital. To justify this stricture, we refer to the saucy defiance

in page 27th, where Count Rumford says, 'I wish that gentlemen who refuse to assent to the opinions I have advanced respecting the causes of this curious phenomenon, would give a better explanation of it than that which I have ventured to offer. I could likewise wish that they would inform us how it happens,' &c. Is this the language of science, or of parliamentary disputation? What rule of philosophising has this author invented, which ordains us to adopt the first explanation that may be offered, provided no better happens to occur at the moment? Is it *induction*—is it *philosophising*—to presume that a position must be admitted, whatever objections are urged against it, merely because no other is offered? Let the Count recollect, that we are in nowise bound to receive his explanations, unless they stand the test of examination on their own merits; that a doctrine is only good because it is absolutely true, not because it is less erroneous than others; and that there is no demand in science for hypotheses, as there is for commodities in a market, where, of course, if what is good cannot be had, what can be had must be taken. We do not recollect that Sir Isaac Newton or Dr Black ever defended their discoveries on such grounds. The language of these men was more tame and subdued. They did not drill us into their doctrines by the word of command, or force their opinions upon us by big words and authoritative menaces. And, after all, there is somewhat in the example of those two men that will probably command as much respect as the imperious postulates of Count Rumford.

Another rule of philosophising is equally peculiar to the practice of this author. It happens that some ingenious men, particularly Dr Thomson of Edinburgh, have called in question Count Rumford's theory of ascending and descending currents. They have accounted for the phenomena which, according to them, misled the Count, by showing that the same appearances are the result of perfectly distinct causes. Now, to all their experiments and reasonings, this *philosopher* is pleased to make answer, not by opposite experiments and arguments, but by an appeal to his own authority, delivered in a tone absolutely insupportable in a scientific controversy—'I am sorry,' says he, 'that so mean an opinion of my accuracy as an observer should have been entertained, as to imagine that I could have been so easily deceived.' p. 29. After all this (and this is all the kind of reply he deigns to make) it was really quite unnecessary for Count Rumford to apologise, as he does in p. 29, for having entered into a controversy, and to promise that he will always abstain from literary disputes for the future. In the concluding sentence we meet with the same supercilious—we had almost
said,

said, insufferable style of indignant talking. 'I am responsible to the public for the accuracy of the accounts which I have published of my experiments; but it cannot reasonably be expected that I should answer all the objections that may be made to the conclusions which I have drawn from them. It will, however,' he adds, 'at all times afford me real satisfaction to see my opinions examined, and my mistakes corrected; for my first and most earnest wish is, to contribute to the advancement of useful knowledge.' We have addressed our remarks to Count Rumford, as the author of the latter part of this passage, rather than of the former, and have shaped our examination of his positions to meet the spirit of condescension which seems for a moment to have directed him in this sentence. We trust that our endeavours have not been thrown away, and entertain some hopes that the labour we have bestowed upon the correction of his errors, particularly in the preceding article, will afford him something of the same satisfaction which, we doubt not, will be felt by all the friends of science at the detection of his plagiarism.

ART. XIII. *A Tour through the British West Indies, in the years 1802 and 1803; giving a Particular Account of the Bahama Islands.* By D. M'Kinnen, Esquire. 8vo. pp. 230. London. White. 1804.

ALTHOUGH no part of the globe presents a greater field of interesting observation than the West Indies, whether we regard the beautiful scenery of those tropical regions, or the peculiar political and moral circumstances of their inhabitants, or their high importance to the wealth and power of the mother country; yet it has happened that they have scarcely ever been visited by any of those communicative travellers whose pens have been exhausted in describing the familiar features of the European world. In truth, a climate very unfavourable to European constitutions, and a state of society as little congenial to the habits of men accustomed to the more polite and secure intercourse of the old world, have conspired to render the southern colonies of America an ineligible residence, and converted them into a place of temporary resort for those adventurers alone whose wants can reconcile them to danger, and who delay not a moment longer than is necessary their return to the eastern hemisphere. A few persons engaged in pursuits of a more than ordinary affinity to speculative inquiries, have indeed presented us, from time to time, with their observations upon the physical and

moral peculiarities of those splendid and interesting scenes: But their accounts have been deficient in the various attractions that render the information so fascinating which is communicated in the shape of narrative, and incorporated with personal anecdote. Hence it is, that, in the scarcity of West Indian travels, we are glad to fix even upon so meagre and unsatisfactory a tract as Sir William Young's Tour through the Windward Islands; and peruse, with an interest disproportioned to its merits, this solitary labourer in that rich and neglected field, in spite of the more than suspicious fidelity of the narrative, where it touches upon controverted points of West Indian policy. For the same reason, we eagerly follow the author of the book now before us in his more extensive wanderings, and hasten to make our readers acquainted with what is to be found in a work so rare, as a Tour through the West Indies. Although we are far from praising it as a masterpiece, and have reason to wonder how so little novelty and interest could be infused into such a subject, we can promise those who may be inclined to accompany us, that their trouble will be rewarded both by amusement and instruction.

The tour of this gentleman was performed in the years 1802 and 1803, and his route lay through both the Windward and Leeward Charibbees, the Great Antilles, and the Bahamas. He landed at Barbadoes, of which his account is pretty minute and particular—proceeded, without stopping at the intermediate settlements, to Dominica, of which a short and general notice is given—and from thence continued his voyage to Antigua. In his account of this valuable little island, he introduces a discussion, whether the whole of the British windward colonies should not be incorporated in the same government, and joined, as the Leeward Charaibbean part of the chain are, under one governor, council, and representative assembly? The reasons which he offers on the opposite sides of this question are so contradictory, the views are so narrow and ill defined, and the inferences so hesitating and obscure, that we are impressed with an unfavourable opinion of the author's skill in colonial affairs. His descriptions of West India scenery are generally lively, and we know them to be faithful. As a specimen, we may select the following sketch of the Antigua landscape.

This valuable little island is for the most part encircled by a range of hills, which rise to a considerable height in the south and south-western quarters. The interior, with the exception of some spots of high stony ground and tracts of pasture, exhibits a level and well cultivated surface of rich cane land.—From a central height turning to the east, and thence northerly to the town of St Johns, the eye traverses a view of one of the fairest and best cultivated tracts of country in the Windward Islands. It is highly pleasing to a person who has recently

recently come from the woods and mountains of the more southern colonies, to behold so extensive a scene of cleared land. The whole of the interior, though divested for the most part of its native wood, is by no means under cultivation of the hoe: A considerable part of the island, where the soil is unfit for canes (which seem particularly to engage the attention of the planters in Antigua), is laid out in pastures, and covered with herds of cattle. Here and there I observed some small groves, consisting principally of white cedars; and on the pasture grounds an abundance of the guava bushes, yielding that fruit from whence the excellent conserves of guava marmalade and jelly are made. Nothing appears more completely like a garden, than the sugar plantation under good cultivation; and such is the prevailing scenery in the interior of this island where it is susceptible of tillage. The green fields of cane (which, when I saw them, in many places had shot up into feathery tops previous to their ripening) were intermixed with provision grounds of yams and eddoes, or the dark and regular parterres of holed land prepared for the reception of the succeeding year's plant-canes. A large windmill on each estate; the planter's dwelling-house and sugar-works, with the negro huts, in their beautiful groves of oranges, plantains, and cocoa-nut trees, completed a landscape that continually recurred in passing over the island.' p. 55-58.

From Antigua, Mr M'Kinnen returned to Barbadoes for the benefit of the trade-wind, and went from thence to Jamaica. His account of this island is unpardonably scanty; and we have particularly to blame a person, residing how short a time soever in that great settlement during so interesting a period, for not procuring some accurate information respecting the feelings excited in all ranks and orders of the people by the events then consummating in St Domingo. Not a word is to be found upon this subject in any part of the book: But our author agrees with all former writers on colonial topics,* in his account of the general uncomfortable character of the society even in that extensive settlement.

The Bahama Islands were the next object of Mr M'Kinnen's attention; and as his residence there was much longer, his account of them is more copious, and we recommend it to the attention of our readers, as the only description of these interesting spots which has yet been given to the public. In the meantime, we hasten to select a few particulars for their entertainment.

The account of the *wreckers* is perhaps the most singular part of the whole narrative. These persons derive their livelihood and distinguishing character from the very dangerous navigation of the Bahama Channel. The immense variety of banks, shallows, and unknown passages and coasts with which those islands (above seven hundred in number) are surrounded, render the

chance of shipwreck greater perhaps in this quarter than in any other part of the ocean. In order to save the crews and the property thus continually exposed to danger, the governor of the Bahamas licenses a number of very daring nautical adventurers, who constantly ply about those seas and channels, in order to obtain a certain salvage, which they are allowed on all goods which they save from shipwreck. Until the American rebellion drove thither a number of loyalists, the inhabitants of the Bahamas were all engaged either in fishing or in this desperate occupation of wrecking, or in piracy. A race of men more hardy—more skilful in the management of small vessels, and more inured to all the dangers and vicissitudes of the seafaring life, were never produced.—As a specimen of the kind of character and sentiments which these occupations formed, we may allude to a conversation related by our author in p. 139. He asked a wrecker what success they lately had? The reply was, that there had been above forty sail of wreckers lying along the Florida coast for four months. Mr M'Kinnen observed, that they must have rendered great service to the crews wrecked on that dangerous passage. The wrecker said, 'No—they generally *went on in the night.*' 'But could not you light up beacons on shore, or show your own lights?' 'No, no,' said he, laughing: 'we always put them out for a better chance.' 'But it would have been more humane.' 'I did not go there for humanity—I went *racking.*'

Our author also relates the following singular anecdote of one of these men, which we extract as a curious illustration of the power which a life of constant vicissitudes has to render any state comfortable.

'A fisherman at anchor in a boat, while attentively employed in casting his nets at a small distance from the shore of an adjacent island, towards the dusk of the evening, was surprised by a sudden gust of wind coming off the land. His boat, notwithstanding all his exertions, was soon driven from her mooring, and, drifting before the wind out of sight of land, was exposed to the swell of an increasing sea, which overtopped and threatened to overwhelm her every instant as it passed. The boat continued, however, to float till the night was somewhat advanced; and, in the awful expectation of his fate, the fisherman, who now had scarcely any thoughts of relief, heard the sound of breakers at a distance. This, which at another time would have excited the greatest alarm, afforded him at that desperate crisis a ray of hope. Scarcely had he begun to distinguish their foam in the darkness of the night, when he found himself plunged into the midst of them, and his boat dashed upon the rocks on the eastern edge of the Great Bahama Bank. At a small distance from these rocks lay a key or bank called *Ragged Island*; and, floating almost senseless on the water, he was flung upon this desolate island.

island. Though now preserved from the waves, there was neither water nor food to be found on the key, which produced only a few fruitless shrubs. But as he had been accustomed to dive for conchs, which abound in many places on the coasts of the Bahamas, he swam to some distance from the shore, and fortunately, on searching the bottom, discovered a sufficient quantity of these shell-fish for his subsistence. For nearly six weeks he lived entirely on conchs, their liquor supplying the place of water. During that time, having erected a signal on shore, he observed several vessels pass without noticing it: But so well reconciled had this Crusoe become to his desert island, that he declared, when taken off, had his wife been with him, he could have lived very happily there for life.' p. 141-143.

The account given by Mr M'Kinnen of John Teach, the famous pirate, known in the Bahamas by the name of *Black Beard*, is extremely entertaining; and shows, that at a period much more recent than the age of the Buccaneers, the trade of depredation was carried on systematically, and to an enormous extent, in the Charaibbean seas. This freebooter lived in the reign of George the Second.

' This extraordinary man had united in his fortunes a desperate and formidable gang of pirates, styling himself their Commodore, and assuming the authority of a legitimate chief. Under a wild fig-tree, the trunk of which still remains, and was shown to me in the eastern part of the town, he used to sit in council amongst his banditti, concerting or promulgating his plans, and exercising the authority of a magistrate. His piracies were often carried on near the English settlements on the coast of North America, where he met with extraordinary success. Perhaps in the history of human depravity, it would be difficult to select actions more brutal and extravagant than Black Beard's biographer has recorded of him. As the narrative to which I allude is generally credited, and bears strong internal evidence of truth, it may be amusing to mention a few particulars of a man who was for some time considered as sovereign of this island.

' In person, as well as disposition, this desperado, who was a native of England, seems to have been qualified for the chief of a gang of thieves. The effect of his beard, which gave a natural ferocity to his countenance, he was always solicitous to heighten, by suffering it to grow to an immoderate length, and twisting it about in small tails like a Ramillies wig; whence he derived the name of Black Beard. His portrait in time of action is described as that of a complete fury; with three brace of pistols in holsters slung over his shoulders like bandoliers, and lighted matches under his hat, sticking out over each of his ears. All authority as well as admiration amongst the pirates was conferred on those who, committing every outrage on humanity, displayed the greatest audacity and extravagance. Black Beard's pretensions to an elevated rank in the estimation of his associates, may be conceived from the character of his jokes. Having often exhibited himself before them as a

demon, he determined once to show them a hell of his own creation. For this purpose, he collected a quantity of sulphur and combustible materials between the decks of his vessel; when, kindling a flame and shutting down the hatches upon his crew, he involved himself with them literally in fire and brimstone. With oaths and frantic gestures, he then acted the part of the devil, as little affected by the smoke as if he had been born in the infernal regions; till his companions, nearly suffocated and fainting, compelled him to release them. His convivial humour was of a similar cast. In one of his ecstasies, whilst heated with liquor and sitting in his cabin, he took a pistol in each hand; then, cocking them under the table, blew out the candles, and, crossing his hands, fired on each side at his companions: * One of them received a shot which maimed him for life. His gallantry also was of the same complexion as this vein of humour. He had fourteen wives, if they may be so called. But his conduct towards one of them appears to have been too unfeeling and unmanly to admit of description. p. 240 243.

He was afterwards conquered, rather than apprehended, by an expedition fitted out for the purpose, after a most desperate resistance, in which he killed almost all the crews of the vessels sent against him; and he died, with most of his own gang, in the battle.

We now proceed to bring together, in one summary, the statements of Mr M'Kinnen which throw any light upon the great questions of West Indian policy. In p. 90, he distinctly mentions the increasing cultivation of coffee in Jamaica, since the misfortunes which have befallen the French colonies. Almost the whole of the mountainous districts of that island are well adapted for this culture; and our author, by admitting that the spirit of West Indian speculation is dangerously rapid in entering every new channel (inasmuch that the growth of coffee has increased a fourth in one year), has granted, that as long as the slave-trade is permitted, an indefinite demand for new supplies will be kept up even in our oldest islands, although no new vent for capital should be opened by farther conquests.

Nothing, however, is more immediately connected with the state of the slaves, than the non-residence of the proprietors. From not attending to this characteristic feature of West Indian society, the friends of the abolition have frequently lost some forcible points of attack; and the planters have with some reason imagined that the argument from ill treatment, which should be chiefly levelled at the overseers and acting managers of estates, was pointed at themselves. In fact, the non-residence of the master, who

* One of the guests, who related this anecdote, perceiving what was likely to happen, adroitly took himself off.

who is principally, perhaps exclusively interested in the good treatment of the stock, leaves the slave a prey to the caprice and mismanagement of the servant, who has only to return a due quantity of sugar, and draw his bills for the price of new negroes. Mr M^cKinnen mentions a circumstance strikingly illustrative of the degree in which slaves must be at the mercy of those most likely to maltreat them. In one of the richest districts of Jamaica, containing 80 estates, not *three* proprietors reside. The rest are domesticated in England, and their plantations are managed by temporary agents.

Although we are not disposed to accuse Mr M^cKinnen of an unfair statement of facts on this important question, we think that, as he himself fairly admits (p. 220.), the shortness of his stay, and his intercourse with prejudiced and interested persons may have exerted an influence on his mind unfavourable to accurate decision. He seems, indeed, like many others, to have expected nothing but one unvaried scene of flagellation and torture; and, finding the reality not quite so terrible as he had apprehended, he is almost tempted to believe that it is not terrible at all, and that the condition of the slaves is tolerably easy and comfortable, because the lash is not always applied, and the slave is sometimes merry. In describing the work of a gang, he says the driver did not exercise his whip, but stood over the slaves directing and *stimulating* the work, p. 28. Now, this is all that the intelligent abolitionists ever contended for. They never maintained that the lash was constantly cracking, any more than they would say that a waggoner is constantly whipping his horses; they averred that the lash is the *stimulating* cause of work in both cases; that the fear of it may prevent its application, but that, if necessary, the stroke is at hand to remind the negro, as well as to quicken the horse. Our author is also surprised to find the negroes so cheerful when landed from the vessel, and so merry in their amusements, p. 9, &c. But surely it is an indifferent proof of their happiness, that they are glad to gain any change after the horrors of the middle passage; and it is no very decisive proof of their general comfort, that during the Christmas holidays they were not without some noisy revelling. We acknowledge, that the thing which pleased us least in perusing this work, was the insinuation frequently repeated, that the condition of West Indian bondage is not much more wretched than that of the negroes in Africa, because we have always considered the argument which pretends to justify the slave trade, on the ground of its improving the lot of the Africans, as the most intolerable of all the sophisms engendered by this fertile controversy—as a defence of the traffic, which adds insult and mockery to the original

ginal crime. If any thing could increase this feeling, it would be the recollection of the purposes to which such topics have been formerly applied; and M^r M'Kinnen has himself given a very touching account of an instance perfectly in point, which we cannot forbear extracting.

'I could not behold the beautiful and fragrant woods over the white strand, without recurring to the fate of that innocent race of people whose name it bears, but who have long since been dragged from their native shores by the merciless ambition and avarice of their European visitors. A passage in Herrera came forcibly to my recollection whilst meditating on the subject, in which he says, that on the first arrival of the Spaniards, this unsuspecting but devoted people were never satisfied with looking at them: they knelt down, lifted up their hands and gave thanks to God, inviting one another to admire the *heavenly men*. Twenty years, however, had scarcely elapsed, before these heavenly men found it convenient to transport them, by force or artifice, to dig in the mines of Hispaniola; a measure to which the court of Spain was tempted to give its assent by the plausible suggestion that it would be the most effectual mode of civilizing and instructing them in the Christian religion. Upon this pretence 40,000 souls (probably the whole population of the islands) were transported to Hispaniola. So exalted was the opinion which this simple people entertained of their destroyers, and so strong and universal is the persuasion of the human mind that a destiny awaits it beyond the miseries and disappointments of its present bounded existence, that many of the Lucayans were induced with cheerfulness to abandon their homes, under a persuasion that they should meet in a happier country the spirits of their deceased friends, with whom the Spaniards represented themselves as living in a state of society.' p. 263, 264, 265.

The last fact which this work presents to us on this interesting question, is one of very considerable importance, and may justly fill with satisfaction those who have of late years discussed these subjects in a speculative point of view. The treatment of the negroes in the Bahama Islands is much more lenient than that which prevails over the more southern and populous colonies. Task-work is universally introduced.

'Their labour,' says our author, 'is allotted to them daily and individually according to their strength; and if they are so diligent as to have finished it at an early hour, the rest of the day is allowed to them for amusement or their private concerns. The master also frequently superintends them himself; and therefore, it rarely happens that they are so much subject to the discipline of the whip as where the gangs are large, and directed by agents or overseers.' p. 172.

Now, what is the consequence of these most important circumstances? 'The negroes in the Bahama islands discover in general more spirit and exertion than in the southern parts of the

the West Indies, *ibid.*; and, of this, various proofs occur in this work. Collateral evidence, if it were necessary, could also be adduced from Mr M'Kinnen's narrative, to prove the adaptation of task-work to produce industry. He tells us that 'the negroes never display so much ingenuity or patience as in the pursuit of prey,' p. 188.; and we meet with repeated proofs of their success in ship-building and the management of small craft at sea; occupations, in which the compulsive labour extorted by the cast-whip is exchanged for voluntary service.

Before concluding our observations on this work, we have to repeat, that it is much less full and instructive than might have been wished. The style of Mr M'Kinnen is unambitious and inoffensive; it aims at nothing elegant or adorned; but is not always pure or correct. A few of his observations border on the ludicrous, chiefly from awkwardness of manner. He tells us, for example, that the governor of Barbadoes, 'from some indistinctness of hearing, generally passes by the arguments of counsel, and consults only the authorities,' &c. p. 32. It appears, however, that this unhappy circumstance does not at all prevent the gentlemen of the long robe from exercising their eloquence, to a judge who cannot hear one word they utter, *ibid.* The author's long declamation on the bad paving of the Kingston streets (p. 83.) might also have been spared, or reserved at least for the Governor of Barbadoes; and the dignity of the remark, 'that pleasure is not generally the offspring of expectation in this life,' p. 79. would have accorded with a more lofty occasion than that of the vessel arriving in port a few hours beyond the expected time. The candid and modest spirit, however, which prevails through the whole of this little work, would have amply atoned for much greater violations of correct taste than any which we have been able to discover in the course of a very careful perusal.

ART. XIV. *Sir Tristrem, a Metrical Romance of the 13th Century; by Thomas of Ercildoune, called the Rhymor.* Edited from the Auchinleck MS. by Walter Scott, Esq. Advocate. Royal 8vo. pp. 506. Printed by J. Ballantyne, for Arch. Constable & Co. Edinburgh, and Longman & Rees, London. 1804.

BEFORE we proceed to examine the merits of this work, we think it our duty to express our disapprobation of the very high price affixed to it by the publishers. We do not affect to sympathize with the author of the Pursuits of Literature, in his sickly antipathy to cream-coloured paper, hot-pressed pages, large margins, and beautiful types; on the contrary, we remarked with

with pleasure, in our review of the *Minstrelsy of the Scottish Border*, that the printer, Mr Ballantyne, had contributed no common share of elegance to that very pleasing and popular work: But we can see no reason why the bard of Ercildoun should be distinguished from all his successors by a more gigantic page; and still less can we approve the limitation of a new edition to a very small number of copies as an excuse for an advanced price. Perhaps it may add to our indignation, that our own labour is thus considerably increased, because it becomes necessary that we should describe more particularly the contents of a valuable work which cannot be known to the whole number of our readers. Be this as it may, we shall now, after discharging our spleen, proceed to our analysis.

We know from various authorities, that the metrical tale of *Sir Tristrem*, composed by Thomas of Ercildoun, was among the first romantic poems exhibited in our language; and we know also, that it was universally considered as the best. If, therefore, the copy now edited by Mr Scott from the Auchinleck MS. can be admitted as a tolerably correct transcript of the original, it will afford us the purest model of the language and taste of our remote ancestors; and as every romance reflects the manners of the times in which it was composed, this very early specimen of our poetry will present many valuable materials to the future historian. The editor therefore has collected, in a short but clear and comprehensive introduction, all the information which the reader can expect relating to his author; he has accumulated, in a large body of notes, various illustrations of the text, from the romances of history in the middle ages; he has prefixed, to each of the three 'fyttes' into which he has divided the poem, a sort of translation, which will be found very convenient by the cursory reader; and he has added a glossary for the use of the more attentive student. We shall presently examine, as minutely as our limits will permit, the labours of the editor; but we wish, in the first instance, to lay before our readers a short outline of the story.

In a country called Ermonie, of which the latitude and longitude may be left to the reader's discretion, provided that he do not place it at too great a distance from Cornwall, lived two great feudal barons, one of whom was called Duke Morgan, and the other Rouland Rise. After a war, in which Morgan had been the aggressor, but had been compelled to accept as a favour a truce of seven years, Rouland repaired to the court of Mark king of England; distinguished himself at a tournament; and gained the heart of Blanche-flour the king's sister. Unfortunately, he had been severely wounded at the combat; and,
still

still more unfortunately, the lovely Blanche-flour, who flew to his assistance, and succeeded in curing his wound, found herself with child during the progress of his recovery. To complete her distress, not many months had elapsed when Rouland received a letter from his faithful friend Rohand, announcing that Morgan had broken the truce, and was advancing at the head of a vast army to seize the dominions of his rival. No time was to be lost. Rouland hastened to the defence of his territories, accompanied by his mistress, who became his wife at the Castle of Rohand, but had the misfortune of witnessing, on the following day, the defeat and death of her husband. This sad event hastened her delivery, which proved fatal. After giving birth to a son, on whom she imposed the name of Tristrem, she delivered to Rohand a ring, formerly the present of King Mark, as a token which might hereafter identify the child; recommended the infant to the Baron's protection, and expired.

Rohand, anxious for the safety of his charge, directed his wife to feign a second delivery; adopted the infant as his son; called him by the inverted name of Tremtrist; gave him an excellent preceptor, under whom he *studied in book* till he was able to puzzle his masters; made him a perfect proficient in all possible games; and taught him the mysteries of hunting, which the youth had improved into a science, so as considerably to excel the system of Manerius, the most sagacious writer on the subject.

Tristrem was fifteen years of age, when a Norwegian vessel, principally freighted with hawks, arrived at Rohand's castle. The boy went on board with his reputed father; challenged the captain to play with him at chess; won all his best hawks from him, which he distributed to Rohand and his attendants, who retired with their prize; and keeping with him only his tutor, pursued his success till he had nearly beggared his antagonist. But the captain reflecting that it was cheaper to leave the port than to pay the money, suddenly gave orders for sailing, and having put the tutor into a small boat, carried Tristrem off to sea. Heaven, however, interfered for his deliverance. The vessel was tossed to and fro, till the pirates, in utter despair, relinquished their prize, and set the boy on shore, with all his winnings, on the coast of Cornwall. Two palmers, whom he met in a forest, were induced by a reward of 20s. to accompany him to court. On their way they found a party of hunters, whose awkwardness in cutting up the hart which they had killed was justly censured by Tristrem: He assumed the knife; carved the beast with unexampled dexterity; blew the *tokening* or death-note on the horn; and having astonished the foresters by his
scientific

scientific instructions, was conveyed by them in triumph to the court of King Mark, who received the accomplished stranger with suitable attention. The introduction of a minstrel after dinner afforded a fresh triumph to Tristrem; who, taking the harp, extorted from the Cornish musician an unwilling admission of his superiority.

In the mean time, Rohand, who had long wandered in search of his foster-son, having met one of the palmers, learned from him the fate of Tristrem; arrived at Mark's court; and, after gaining admittance with much difficulty, told him the real story of the young man, and shewed him the ring; in consequence of which, Tristrem was publicly acknowledged as his nephew. A farther explanation with Rohand inflamed the young hero with an ardent desire to revenge his father's death. Mark, after some difficulties, conferred on him the order of knighthood, furnishing him with a small but chosen army of 1000 men, who sailed with him to Rohand's castle. Soon after, Sir Tristrem, attended by fifteen knights all bearing boars' heads, and closely followed by Rohand and his troops, appeared, a most unexpected and unwelcome guest at Duke Morgan's table. A scene of mutual insult was terminated by a battle, in which the usurper lost his life; and Tristrem, having recovered his hereditary dominions, which he conferred on his excellent friend Rohand, returned to the court of Cornwall.

Mark and all his courtiers were at this moment in great tribulation. Moraunt, the champion of Ireland, was come to claim the accustomed tribute, and the Cornish barons were disposed to unlimited submission; but Tristrem ordered the tribute to be withheld, repaired in person to Moraunt, and defied him to combat. The encounter, which took place on an island, was long and obstinate; but at length, though Tristrem received a severe wound in the hip, he had the honour to kill his antagonist by a terrible blow on the head, in which Tristrem's sword was broken, and left its point firmly fixed in the skull of Moraunt. The deliverer of Cornwall was now declared heir to the crown; but his wound, which had been inflicted by a poisoned weapon, became daily more troublesome; and after baffling the skill of all the Cornish physicians, rendered the patient so disgusting, that none of his attendants, excepting Gouvernail his faithful servant, had the courage to come near his person. And thus ends the first fyfte of the poem, containing 102 stanzas.

After three years of torture, Tristrem requested from his uncle a ship, with a sufficiency of provisions, and, attended only by the faithful Gouvernail, abandoned himself to the chance of the winds and waves, which at last brought him to Dublin.

Calling

Calling himself Tremtrist, and alleging that he was a merchant wounded by pirates, he continued in the harbour to solace himself with his harp, the sound of which attracted daily crowds to his ship; and at last procured for him a visit from the Queen, who was admirably skilled in medicine, and soon undertook and accomplished his cure. He was called to court; and became the instructor of the beautiful Ysonde the king's daughter, in the various games of chess and tables, and in the arts of music and poetry; so that his fair pupil, already a paragon of beauty, shortly became a model of elegant accomplishments. But the hero of Cornwall, the conqueror of the fierce Moraunt, grew tired of his disguise, and of living as a preceptor to the niece of his slaughtered enemy. He asked leave to depart, and returned to the court of Mark, to whom he praised so warmly the charms of the fair Ysonde, that the amorous monarch conjured him to return and obtain her from her parents, while the envious barons strongly pressed him to undertake an embassy which, if his real name should be discovered, must, as they supposed, prove fatal to the ambassador.

Tristrem, perfectly aware of his danger, but indifferent to its consequences, undertook the commission, and carrying with him fifteen knights, all like himself disguised as merchants, arrived in Dublin harbour at a moment when its inhabitants were in extreme consternation at the approach of a terrible dragon. As kings never kill dragons with their own hands, the king of Ireland contented himself with offering the possession of his daughter to him who should destroy the monster. Tristrem, of course, undertook the task; and though his armour was all burnt off his back by the fiery breath of the dragon, killed him, cut out his tongue, and putting it into his boot, prepared, as his horse had been destroyed to walk home in triumph. But Tristrem was unlucky about poisons. The poisonous tongue of the dragon threw him into a swoon; and while he lay senseless, the king's steward, finding the dragon quite dead, cut off its head, hastened to court, and obtained the hand of Ysonde. Luckily that lady had great doubts of the steward's courage. She repaired with her mother to the spot where the dragon lay, found Sir Tristrem in a swoon, poured an antidote down his throat, and having thus recovered him, soon learned from his own mouth that he was the real victor, and prepared to prove it in the teeth of the false steward. They then carried him home, and placed him in a bath; but Ysonde, suspecting the pretended merchant to be her old preceptor, drew and examined the sword, compared its broken point with the fragment extracted from the skull of Moraunt, and discovered that he was certainly the same wicked Tristrem who had killed her uncle. She now piously determined

determined to murder him in the bath; and her mother, on learning his name, readily concurred in this laudable project; but the arrival of the king fortunately saved his life.

Tristrem, smiling at their rage, related his past adventures, pleaded his services in the character of Tremtrist, and the late death of the dragon, in extenuation of his victory over Moraunt, and so well satisfied the king, that on his promise to see Ysonde married to the King of Cornwall, she was immediately entrusted to his protection.

At their departure the queen mother, anxious to insure the happiness of the married couple, prepared and delivered to Brengwain, Ysonde's favourite damsel, a 'drink of might,' or philtre, with directions that it should be divided between the bride and bridegroom on the wedding evening. But fortune decided otherwise. During a contrary wind, when Tristrem was faint with heat and thirst from the fatigue of rowing, Ysonde called for some liquor to refresh him, and Brengwain inadvertently brought the fatal 'drink of might,' of which Tristrem and Ysonde having partaken, they imbibed the sudden and resistless passion which death alone could overcome. Even a dog named Hodain, who licked the cup after it was set down, felt its invincible power, and became their inseparable companion. Ysonde arrived, was married, and escaped the detection of her guilt, by substituting, on the first night of the nuptials, the faithful Brengwain, whom she afterwards ungratefully purposed to sacrifice to her security, but was fortunately prevented.

Soon after the marriage, an odd incident occurred. An Irish Earl, long in love with Ysonde, came to court disguised as a harper; and refusing to shew his skill till the king should have granted him a boon, obtained as that boon possession of Ysonde, and carried her off. She was actually embarked, when Tristrem, who only learned the event on his return from hunting, seized his rote (a musical instrument often mentioned in romances) rode hastily to the shore, and beginning to play, caught the ear of his mistress. The Earl, to whom his person was unknown, was persuaded by her to land, hoping to engage the musician in his service; but Tristrem, seizing her horse's bridle, plunged with her into the forest, and after a taunting reproach to his rival, disappeared. The lovers spent a week in the forest, after which the knight restored Ysonde to her husband with a proper reprimand for his excessive generosity to minstrels.

From henceforth their happiness was continually disturbed by the watchfulness of two spies: the one, Meriadok, a wicked Cornish knight; the other, the court dwarf, who constantly kept awake the jealousy of the indolent Mark. One night, after a heavy

heavy fall of snow, Tristrem being afraid that his footsteps would betray him in his passage to Ysonde's apartment, tied on his feet a sort of snow shoes which would have saved him from detection, but that a piece of his kirtle, being shut in by the sliding board through which he entered the queen's chamber, unluckily attracted the eye of Meriadok. Another time, Tristrem, being separated from his mistress, contrived to correspond with her by means of small bits of wood, on which were engraved secret characters, and which were floated down a small stream which ran through the orchard of Ysonde's country residence. In this orchard their assignations were carried on, till they were discovered by the dwarf concealed in a tree. The King was afterward hidden in the same tree; but Tristrem luckily perceived his shadow, and by a pretended altercation with his mistress, quieted Mark's suspicions so effectually as to obtain a three years interval of tranquillity. A third artifice of Meriadok was more successful. Tristrem, at that time high constable, slept, in virtue of his office, in the queen's apartment. One night when the king, by the advice of Meriadok, had caused himself, his wife, and his nephew to be let blood, and the floor of the queen's room to be sprinkled with flour, Tristrem hoped to evade detection by springing a distance of thirty feet from his own bed to that of Ysonde. But his wound opened from the effort; the sheets were stained with blood, and he was banished from court, whilst his mistress undertook to purge herself of the imputed crime by oath, and by the fiery ordeal. Her lover, in a mean disguise, joined the retinue during the march of the court to Westminster; and at the passage of the Thames, was chosen by Ysonde to carry her from the shore to the boat. On landing, he contrived to fall with her in a most indecent attitude; and the queen having sworn that no man had ever familiarity with her person excepting the king and this awkward peasant, fearlessly offered to hold the heated iron, but was absolved by her husband from this dangerous trial. The second fyfte, which concludes in this place, contains 107 stanzas.

Tristrem, not venturing to return to Cornwall, undertook the defence of Triamour, King of Wales, against Urgan who had invaded his dominions. Urgan was a giant, with all the vices which attach to the gigantic character, and besides, brother to the Duke Morgan; and he fought with a club twelve feet long. They soon met in single-combat, in the course of which Tristrem cut off the giant's right hand, yet he continued to fight with his left, and once felled his adversary to the ground; but at length fled to his castle, while Tristrem picked up the hand, and rode off. Urgan, however, speedily returned with some salves for

the purpose of reuniting the hand to the stump; and not finding it, fiercely pursued Tristrem to a bridge, on which they renewed the encounter. Tristrem was now hardly pressed, his shield being broken by a blow of the club; but, evading the next stroke, he pierced his enemy to the heart, and Urgan, in the agonies of death, sprang from the bridge into the river. Triamour, thus delivered from the giant, bestowed on his protector the sovereignty of Wales, together with a little dog called Peticrewe, who was spotted with red, blue, and green; and Tristrem, immediately restoring the crown to Blanche-flour the king's daughter, sent the little particoloured dog as a present to the fair Ysonde.

The increase of fame attending this signal victory obtained for Tristrem a reconciliation with his uncle. He was appointed high steward; and the 'drink of might' still continuing to operate, recommenced his amours with Ysonde, and was again discovered by Mark, who banished him from court, together with his paramour. The lovers, retiring into the forest, found a cavern constructed in old times by the giants; contentedly fixed their abode in it; and subsisting on the venison taken by their dogs Hodain and Peticrewe, enjoyed almost a year of repose and happiness. One day, the attendants of Mark, who was hunting in the forest, discovered them asleep in their cavern, and made their report to the king; but it accidentally happened that Tristrem had placed the drawn sword with which he had probably been cutting up a deer, between himself and his mistress; and Mark, who on visiting the cavern found his wife and nephew still asleep, was fully convinced, by this circumstance, of their perfect innocence. He stopped, with his glove, a crevice in the rock through which a ray of the sun darted on the face of the beautiful Ysonde, and retired; and the lovers who, on waking, recognized with surprise the royal glove, were still more surprised by the arrival of a numerous retinue, who conducted them in triumph to court. But the officious dwarf was indefatigable. Through his means the lovers were detected by the king at a stolen interview, and Tristrem was again obliged to fly. After traversing Spain, where he slew three giants, and visiting the sons of Rohand in Ermonie, he passed into Brittany, entered into the service of Duke Florentin, and having conquered all his enemies, firmly established his authority. Florentin had an only daughter named Ysonde with the White Hand, who hearing Tristrem sing a lay in praise of his mistress, of which she supposed herself the object, mentioned the circumstance to her father, in consequence of which the Duke readily offered to Tristrem the hand of his daughter. The knight having reflected that a life of incest and adultery was certainly sinful,

sinful, and that a life of exile was not pleasant, accepted the offer, and the marriage ceremony was performed. But on passing to the bridal chamber, his ring, the present of his mistress, dropt from his finger. On this accident his former passion returned with redoubled violence ; his heart reproached him with his infidelity, which he determined not to carry any farther ; and in spite of his wife's uncommon beauty, which was only surpassed by that of his mistress, he adhered through life to this determination.

Tristrem had received, as a nuptial present, a tract of country immediately adjoining to the territories of a ferocious giant named Beliafog ; but with the strict injunction from Florentin that he should abstain from hunting on the lands of that monster, who was brother to Morgan, Urgan, and Moraunt. Tristrem, of course, could not resist the temptation of trying his strength against the last of this tall family ; he hunted over his lands, insulted him, fought him, and ultimately cut off his leg : after which, Beliafog, who did not possess the secret of Urgan's salve, sued for mercy, and became his vassal. Tristrem ordered him to build a hall in honour of Ysonde and Brengwain ; and Beliafog, who seems to have possessed much more ingenuity than usually belongs to a giant, faithfully completed it within his castle, to which he taught Tristrem a secure and secret approach, and adorned it with sculptures exactly representing the whole history of his former life, with exact likenesses of Ysonde, Brengwain, Mark, Meriadok, Hodain, and Peticrewe.

The wonderful excellence of these sculptures produced an extraordinary accident. Ganhardin, brother to Tristrem's wife, having discovered, from an expression artlessly dropt from his sister, the singular continence of her husband, and having expressed his resentment to the Cornish hero, received in answer such a description of the Irish Ysonde's beauty, that he felt a strong curiosity to see her, and became, from this time, the confidant of his brother. Being conducted by Tristrem to the Marvellous Castle, which he could scarcely approach without trembling, and having viewed the portraits of Ysonde and Brengwain, he was so astonished with their beauty that he staggered, fell backwards in a sort of swoon, and, on his recovery, found himself with a great contusion on his head, and a violent passion for the charms of Brengwain, whom he determined to see in person without loss of time. Tristrem was not less impatient to revisit his mistress ; and the two friends departed together. In the mean time Mark had appointed a new constable, named Canados, who in his turn became in love with Ysonde, tortured her by his importunate addresses, and, in hopes of advancing his suit, tauntingly informed

her of Tristrem's marriage in Brittany. Ysonde, much disturbed, retired with Brengwain and her attendants into the forest to indulge her grief, at the moment when Tristrem and his companion arrived there: The meeting between the lovers soon produced a satisfactory explanation; their usual intercourse was renewed, and Ganhardin was betrothed to the faithful Brengwain. But Canados being informed of what had passed, collected the whole force of the country, and marched to surprise his rival, who, though apprised of his danger by a letter from his friend Gouvernail, had no time to prepare for resistance; but, after concealing himself in the forest assumed the disguise of a beggar with 'cup and clapper,' and remained near the court while Ganhardin escaped to Brittany. Fortunately Brengwain found means to excite the jealousy of Mark against Canados, and that troublesome favourite was disgraced and banished. She then, at the request of Tristrem, procured a tournament to be proclaimed, at which he and Ganhardin, after desperately wounding Meriadok and Canados, took a signal vengeance on 'all the courtly tale-bearers;' and, without discovering their names, returned to Brittany. Here, a young knight, also named Tristrem, accosting the hero of Cornwall, requested his assistance for the recovery of his mistress, whom a ravisher, aided by fifteen knights, was then bearing off to a neighbouring castle. Tristrem readily assented, attacked the spoilers, and, though his young companion was slain in the conflict, succeeded in defeating the fifteen knights. But he was hurt by an arrow in his old wound—and thus ends the ancient MS. The story is concluded by the editor in the same antiquated language and metre, from the materials supplied by an old French metrical fragment.

Tristrem's wound growing daily worse, is at length declared incurable, except by the medical skill of Ysonde, who had probably inherited from her mother the receipts which cured his first gangrene in Ireland. Tristrem sends Ganhardin with his ring to implore her assistance, directing him to assume the disguise of a merchant, to hasten her embarkation, and, in his return to notify his success by hoisting a white sail, or his failure by hoisting a black one. Ganhardin executes his commission with great address, and brings over the Queen of Cornwall: But Ysonde of Brittany, who had overheard the directions, fired with indignation and jealousy at the approach of her rival, makes a false report to her husband; and Tristrem, hearing that the black sail is hoisted, yields to despair and dies. The Queen of Cornwall receiving the sad news on her arrival, rushes to the castle where his corpse was laid out, throws herself on the bier, and expires with grief.

Such

Such is the outline of the story now edited by Mr Scott from the Auchinleck MS. ; and the reader will probably admit, that it contains more variety of incident, and more natural delineations of character, than could be reasonably expected from a composition of the early period to which it is ascribed. That Thomas of Ercildoune composed a romance on this subject, and that it was preferred by his contemporaries to every minstrel tale of the time, is a well known historical fact. The question is, whether this be that identical work ; and the discussion of this subject, which, as Mr Scott has managed it, is connected with much curious and interesting matter, shall now be shortly examined.

His Introduction contains, 1. Some account of Thomas of Ercildoune ; 2. A history of the romance of Sir Tristrem ; and, 3. Observations on the copy now published.

On the first of these points, the editor has collected all the information which could be derived from historians or poets, from tradition, or from ancient charters ; yet the reader will perhaps be surprised to find, that this information amounts to no more, than that Thomas, to whom an obscure tradition has given the surname of Learmont, and who acquired, from his poetical talent, the appellation of the Rhymer, possessed certain lands at Ercildoune, now called Earlstoun, a village situated on the Leader, about two miles above its junction with the Tweed, which lands were granted, after his death, to the Trinity-house at Sottra, by Thomas, who calls himself ' son and heir of Thomas the Rhymer of Ercildoune.' In fact, many of the documents respecting this singular man relate only to his prophetic character, which is no longer interesting ; but Mr Scott has been able to ascertain, within very narrow limits, one very important point, viz. the time at which the Rhymer may be supposed to have produced his romance of Sir Tristrem. The following are the *data* for this approximation. The deed of conveyance signed by his son and heir, which is printed in the Appendix, is dated in 1299 : the father, therefore, was then dead. But, if we may trust to the authority of Henry the Minstrel, he must have survived 1296 ; in which case we cannot err very much in placing his death in 1297. Concerning his birth we have no direct testimony ; but its date may be thus inferred. The Rhymer was witness to a deed granted by Petrus de Haga de Bemersyde : they therefore were contemporaries. But Petrus de Haga was himself a witness to another charter, by which Richard de Moreville, Constable of Scotland, granted certain serfs to Henry St Clair. Moreville was Constable from 1162 to 1189 : this last year, therefore, is the very latest which can be assigned as a date to the grant. But no man, probably, could be chosen as a competent

witness before twenty years of age, so that the birth of Petrus de Haga cannot be brought lower than 1169; and if we assign seventy years to his life, which is certainly a large allowance, we shall place his death in 1239. Therefore Thomas, who, having been a witness to a charter granted by him, was consequently twenty years old at that time, must have been born as early as 1219; and is very likely to have composed his poem about the year 1250. This deduction leads us to think that Mr Scott, from the fear of exaggerating the antiquity of his author, has fallen into the opposite extreme in placing his birth between 1226 and 1229; a date which we also think at variance with that which he has assigned to the composition of the poem.

We will now, for the sake of connexion, examine the third division of Mr Scott's essay, reserving the second, which is by far the most important of the whole, for a separate consideration.

The poem now printed begins by the following lines:

I was at Erceldoune,
With Thomas spak I thare;
Ther herd Yrede in roun
Who Tristrem gat and bare,' &c.

It therefore does not profess to have been written by Thomas, nor dictated by him, but to have been taken from the recitation of a minstrel who had heard and retained in his memory the words of the Rhymer; and it remains to be seen, how far these pretensions are founded on external or internal evidence. The large volume from which Mr Scott's transcript was taken, called the Auchinleck MS., was compiled, as the editor supposes, in some Anglo-Norman convent; it contains, in its present state, 333 leaves and 42 different pieces of poetry (of which a description is given in the Appendix), many of great length, and all originally ornamented with illuminations, which have been torn out. From some passages contained in it, we learn that the compilation cannot have been completed till 1330, that is to say, till thirty-three years after the death of Thomas; but even this interval is not sufficiently long to invalidate the preceding assertion of the reciter; and besides, it is evident that such volumes as this were not the work of a single year. The paintings alone were sometimes the occupation of almost a whole life. Neither were minstrels the constant inhabitants of convents. Their recitations were apparently taken down during their occasional visits, and afterwards fairly transcribed and illuminated in the conventual volume, or, perhaps, being first written on separate skins of parchment, were afterwards bound up together. There is therefore no reason for doubting, that the poem before us may have been written from the dictation of a minstrel who had actually seen and conversed with the Rhymer. But allowing this, it is possible that the existing poem may have

have been modernized and interpolated; and Mr Scott is of opinion that this must have been the case: but he contends, and, as we think, very justly, that the specific marks by which Robert de Brunne (in a passage which we shall presently notice) describes it, that is, the *quaint English*, and the complicated construction of the stanza, which was so difficult to retain in the memory—together with a brevity and conciseness of narration totally different from the common style of romance, and an elliptical and indefinite mode of expression, which is the usual characteristic of an infant language—concur in proving that the general phraseology of the poem has not been very materially altered. Indeed it appears to us, that the interpolation of many new stanzas of eleven lines would have baffled the skill of any writer of the thirteenth or fourteenth century, unless he had possessed that very uncommon facility of arranging similar final sounds, which procured to Thomas the distinctive appellation of *the Rhymer*.

Having thus far considered the authenticity and antiquity of the poem, we proceed to its history, which forms the second division of Mr Scott's introductory essay. There can be no doubt respecting the people from whom the materials of the story are derived, because *Tristrem* is confessedly a Celtic hero. He is often mentioned in the Welsh triads, and by the Welsh poets; and his fame is still preserved in the traditions of Brittany. Marie, a Norman poetess of the thirteenth century, in her '*lai dee chevrefoil*' (of which a translation is published by Mr Scott) records one of his adventures which she professes to have translated from a Breton lay, and founds on this assertion her claim to credit for its authenticity. But she alludes at the same time to a French written history of *Tristrem*; and the king of Navarre, who writes his songs at the commencement of the thirteenth century, and Chrestien de Troys, who flourished at the end of the twelfth, bear witness to the popularity of the story in their time. These passages also are quoted by the editor; but he still contends that Thomas did not translate his work from any French original, but derived his materials immediately from a Celtic source; and he defends his opinion not only by very plausible reasoning, but by direct and positive authority.

Our readers will recollect that, during several ages after the arrival of the Saxons, the whole western coast of this island, as far as the mouth of the Clyde, was still occupied by the Britons; and that the northern kingdoms of Cumbria and Strathclyde gave birth to three of the most celebrated Welsh poets, namely Aneurin, Merlin the Wild, and Llywarch-Hen. The Saxon chronicle relates that the Welsh of these districts voluntarily put themselves under the protection of Edward of Athelstan; but,

soon after this, they became tributary to the Scottish kings, with whose subjects they were by degrees completely amalgamated; though there can be no doubt that they retained, till a much later period than that when Thomas wrote, their distinctive language, traditions and customs. Now the position of Ercildoune, or Earlston, is on the borders of the Celtic district of Reged, the kingdom of Urien, and of Ywain, two celebrated heroes of romance; and it is certainly natural that Thomas should found, on this favourable position of his residence, the pretension of superior authenticity for his mode of relating a story already popular, and that his pretensions should be allowed by his hearers. Accordingly, Mr Scott has given us a translation of two metrical French fragments of the history of Tristrem, which he conjectures to be the composition of a certain Raoul de Beauvais who wrote in 1257, and in which the author professes that his narrative is perfectly conformable to that of *Thomas*. It is also strictly conformable to the story now published; and this coincidence seems to prove that the person meant can be no other than the Rhymer; because, if we should suppose two persons of the same name, both poets, and both chusing the same subject, it is scarcely credible that both should select, from the great variety of matter which was offered to them, precisely the same materials, and arrange them in the same manner. The same reasoning does not apply with equal force to a quotation from another French minstrel, who, in a metrical life of King Horn, appeals also to a Thomas as the original author of that romance. Here indeed there is a presumption, because the scene is laid in Northumberland, and the names of the characters are purely Saxon; but, as Mr Scott candidly admits, we have no historical evidence which attributes the poem in question to the Rhymer of Ercildoune. But be this as it may, we are now entitled to infer, not only that the Rhymer, being anterior even to Robert of Gloucester, is by far the earliest English poet of eminence, but also that our language was so far cultivated as to be fit for the purposes of composition much sooner within the Scottish dominions, than in what was then called England. This has been suspected by others, but its truth has been ascertained by Mr Scott, who has first explained a passage of an ancient historian (Robert de Brunne) which has often been quoted but always misunderstood.

‘ I made nocht for no *disours*,
 Ne for no *seggours*, no *harpours*,
 Bot for the luf of symple men,
 That *strange* Inglis cannot ken.—
 I see in song, in sedgeyng tale,
 Of Ercildoune and of Kiudale,

Now

*Non tham sayis as thai thaim wrought,
 And in thir saying it semes noght.
 Thai may thou here in Sir Tristrem;
 Over gestes it has the steem,
 Over all that is or was,
 If men it sayd as made Thomas.
 Bot I here it no man so say;
 That of som copple som is away.
 So thare fayre saying here before,
 Is thare travaile nere forlorne;
 Thai sayd it for pride and nobleye,
 That were not suylke as thai—
 Thai sayd it in so quaint Inglis,
 That many wate not what it is—
 And forsoth I couth noght
 So strange Inglis as thai wrought,' &c.*

It was always supposed, that, in these lines, the author meant to accuse the *disours* or *seggours*, of perverting the phraseology of the metrical tales which they undertook to recite; instead of which, as Mr Scott justly observes, he certainly intended to describe the style of the Rhymer and of Kendale as abounding with *strange and quaint Inglis*, and the poem of the former as composed of couples or stanzas so complicated, that few vulgar hearers could comprehend their meaning, and no reciter was able to recollect the whole, but always left some stanza imperfect. He also states, that these poets wrote for 'pride and nobleye,' for the great and powerful, not for such as his simple brethren; and though he mentions only two by name, he apparently means to describe the northern minstrels in general, whose superior skill is attested by the general tenor of all our early poetry, and whose peculiar privileges are recorded in ancient Scottish statutes, in which they are ranked with knights and heralds, and permitted to wear silk robes, a dress limited to persons who could spend a hundred pounds of land-rent. While the southern English dialect, which apparently had its origin in the towns, was banished from the castles of the Anglo-Norman kings and nobles, the northern dialect, composed of the same elements, and encouraged by the patronage of the Scottish sovereigns, made daily advances to perfection; and became the vehicle of much spirited and original poetry, before Robert of Gloucester had been able to complete the long string of rhymes which constitute his history. The fragments of *Gawain and Gologras*, and *Galoran of Galoway*, published by Mr Pinkerton, are probably anterior even to *Sir Tristrem*, and have certainly no marks of translation. Many others of equal antiquity are likely to have perished; but the cloud of translated romances, most of which are in the northern dialect,

dialect, and unquestionably written in the early part of the 14th century, fill up a considerable chasm in our literary history, and furnish a regular gradation of style from Thomas of Ercildoune to Chaucer.

Upon the whole, we are much disposed to adopt the general inferences drawn by Mr Scott from his authorities, and have great pleasure in bearing testimony to the very uncommon diligence which he has evinced in collecting curious materials, and to the taste and sagacity with which he has employed them. But there is one of his opinions to which we cannot subscribe. He says, (p. lii. & liii.) ‘It may be thought that the British spoken, as we have seen, by the tribes of Cumbria and Strath-Glwyd, as well as the proper Scots, ought to have entered into the composition of the new language. But, although possessing beauties of its own, the Celtic has every where been found incapable of being amalgamated with the Gothic dialects, from which it is radically and totally distinct.’ We presume that there is here an accidental inaccuracy of expression, or, more probably, an error of the press, since it cannot be meant to state that the British was the language of the proper Scots. But we object to the position; because we apprehend, that the elements of *any language* are capable of being admitted into *any other*.

The modern Welsh, we believe, have adopted many English as well as French words, only subjecting them to the Celtic mutations; the Saxons have received many from the Welsh, having first, of course, suppressed such mutations. The French, and other *romance* languages, contain, together with Latin, much Celtic and some Gothic, that is to say, such a combination as is here stated to be impossible. If the Anglo-Danish colony of Bernicia had borrowed from the British dialect as much as the Danes of Noustria did from the speech of that province, they might possibly have formed a language not very dissimilar to the Norman; because the Britons, like the Gauls, probably received from Rome, together with the arts of civilized nations, most of the terms by which they were denominated. To explain, step by step, the nearly contemporary formation of our mixed language in England and Scotland, under very different political circumstances, is a difficult task; and we shall not consider the problem as definitively solved, until more light shall have been thrown on the filiation of the other European languages.

We have extended this article to such a length, that we must forbear to enter on an examination of the notes and glossary, which form about one third of the volume. Of the last, it is perhaps sufficient to say, that it explains whatever is not inexplicable; and that we could not, if we wished to do so, point out
above

above three or four passages where the sagacity of the editor appears to have been foiled by the author's obscurity. With regard to the notes, they contain an almost infinite variety of curious information, which had been hitherto unknown or unnoticed; and we are persuaded, that they would afford much amusement even to those readers who may be too indolent to derive any from the superannuated poetry of Thomas of Ercildoune. We must therefore conclude, as we began, by expressing our regret that the very limited and scanty edition now printed will preclude many from possessing a work which has been compiled with much labour, and which is no less creditable to the taste and genius, than to the learning of the editor.

ART. XV. *An Account of Travels into the Interior of Southern Africa.*

By John Barrow, Esq. late Secretary to Lord Macartney, Auditor-General of Public Accounts at the Cape of Good Hope, and Secretary to Lieutenant-General Francis Dundas during his Government there. Volume Second. 4to. p. 464. Cadell & Davies. London 1804.

THE title of this volume is calculated to deceive the reader. With the exception of a single excursion up the country, narrated in one chapter, the work has no relation whatever to travels, and appears to have obtained that title, merely from the circumstance of the author having formerly published a book of travels nearly of the same size. Considered, however, in its proper light, of a dissertation upon the importance of the Cape of Good Hope, the work is extremely valuable. It contains a very full, indeed rather a prolix statement of the argument for taking and retaining possession of that settlement. It abounds in all the matters of fact which can be brought to the decision of this interesting question; and is interspersed with a considerable portion of new information relative to the points at issue. For our own parts, we never entertained any doubts upon the subject; but, had we been disposed to hesitate, the demonstration of Mr Barrow would have fixed our opinion. At the present moment, it is highly important that the public should be fairly informed upon so interesting a topic of practical policy. We shall therefore lay before our readers, an abstract of the argument, interspersing such observations as appear necessary to its farther elucidation, and pointing out, as we proceed, the errors into which Mr Barrow's manifest ignorance of political economy has frequently betrayed him. We must premise one remark upon the manner in which the work is stated to have been written.

'If,' says he, 'any of the hints thrown out in this volume should prove beneficial to my country, by suggesting such measures as may avert

avert the evils which now threaten our trade and settlements in the East, I shall consider the labour and application of *three months* not to have been bestowed in vain.' p. 31.

If this silly boast were justified by the fact, our contempt for the author of it would only be increased. A huge quarto written in three short months, does not answer our ideas of the respect due to the public, and to a grave and extensive subject. The consequence is, that Mr Barrow has made a very indifferent book. The whole of the case is indeed to be found within its four corners. But the argument is as ill arranged and as ill brought forward as can easily be imagined. The materials are badly disposed, and the whole reasoning produces a feeble effect. The force of the facts is dilated by repetition; and the style is so inaccurate and inelegant, that we heartily wish the manufacturer had divided his labours with other artists, and set abler hands upon those crude materials which he could furnish, but had no time, if any talents, to work up. We see in his blank pages the promise of another large book; and we do earnestly exhort him to give up the foolish idea of writing at the rate of four quartos *per annum*.

The preliminary chapter opens with some senseless declamation against the French emigrants, for their partiality towards France, and their antipathy to her enemies. Although it is by no means our intention to vindicate the whole of that unhappy race for their conduct, during the unexampled difficulties in which they were involved, yet we must be permitted to demand that their numbers on the one hand and their trials on the other be fairly taken into the account. It would have been miraculous indeed, had so many thousands of all ages, taken from the classes of society least accustomed to the vicissitudes of fortune, and plunged into every variety of wretchedness, maintained throughout a uniform propriety and unimpeachable wisdom of demeanour. But if faults, or even crimes, have been committed among them, sure we are, that Mr Barrow has not specified any matter of accusation which deserves our regard, when he only charges them with an invincible attachment to their unhappy country. As a specimen of all kinds of enormity, he extracts a most affecting passage from the Duc de Rochefoucault's travels. It is a picture of natural and amiable feeling, which cannot be contemplated without the liveliest emotion. That ill-fated nobleman there expresses the greatest affection and gratitude towards England, and the abhorrence which he feels for the revolutionary enormities of his countrymen; but, with a just and generous warmth, he points the contending emotions by which he is unavoidably agitated—remembers that France, though she abused and de- spitefully

spitefully used him, is still his country—owns himself still interested in her fortune—describes how painful it is to receive loud congratulations from her enemies upon her miseries and humiliations—and shows that he has a heart not entirely alienated from the place of his birth, and the land of his fathers, although it is no longer his happy lot to be numbered among her children. We are astonished that Mr Barrow, whose own patriotism is so ardent, should have no sympathy for the feelings of this illustrious exile. For our parts, we are far indeed from wishing to see such cosmopolitism prevail, as that which should teach all men to alienate their hearts from their country as soon as the wickedness of a few of her inhabitants had delivered her up to civil dissensions; and, for us, that patriotism has no charms which can change its object without a pang, and take root in each hostile ground, assimilating itself successively to every variety of exposure.

Our author, in the course of his introductory remarks, expresses his surprise at the singular difference between the character of the Dutch in their own country and in the colonies. He describes them as the most indolent and prodigal of all nations in the latter situation; whereas, at home, they are noted for frugality and industry. This statement is important—it is quite new to us—and it is totally false. The colonial industry and wealth of the Hollanders, is as conspicuous as their toils and opulence at home. It is in vain that Mr Barrow tells us, they devolve their labour upon slaves; that at the Cape, the purchase of a slave is the first use a man makes of a little money which he may acquire; and that, at Batavia, 100,000 Chinese do all the business of the colony. This only proves that the constitution of Europeans in those climates is ill adapted to hard work; and that the Cape planters and Batavian settlers, like the planters of Surinam and Demerary, use slaves as we do beasts of burden. No man can deny the prodigies which Dutch industry have performed on the coast of Guiana; yet you may traverse all Guiana without seeing a white man at work, except in his comptoir or warehouses. Many of the facts stated by our author prove that the analogy of the Dutch character in the east and in the west is complete. Their domestic slaves are treated with too much indulgence; while their field slaves, and, above all, their Hottentot labourers, are the victims of a cruelty and avarice equal to that for which the Dutch name has uniformly been infamous in the new world. (Vide p. 108. 135.)

Before proceeding to the main object of this volume, we shall notice the chief information communicated by Mr Barrow in his narrative of the military expedition to the Kaffer frontier: this relates to the interior of Africa.

Our

Our readers will probably recollect, that M. Le Vaillant, after being stopped in his progress northward by want of water and several untoward accidents, found that had he begun his journey about this part of the country (what he calls the country of the Housonanas) he might have proceeded with ease, from the high state of its cultivation compared with the barbarity of the Hot-tentots. Mr Barrow presents us with some interesting particulars respecting the Booshoonas, of whom Le Vaillant evidently speaks, and whose country he must only have known by report. This people is a tribe of the Kaffers; the men are of a tall athletic form; of simple, pastoral manners; living almost entirely on milk and vegetables, and following the occupation of shepherds. Two commissioners, sent from the Cape by government in 1801, for the purpose of procuring draught oxen, reached their capital, *Leetakoo*. It is, according to their report, situated in a finely cultivated and enclosed country, and is very large and populous. The commissioners estimated its size at between two and three thousand houses, and its population at from ten to fifteen thousand. It lies nearly in latitude $26^{\circ} 30'$ south, and longitude 27° east from Greenwich. The chief received them with hospitality, and introduced them to his wives and families. The following is the description given of their houses:

'His house, like all the rest in the town, was built in a circular form, being about sixteen feet in diameter. The bottom part, to the height of four feet from the ground, was stone laid in clay, and wooden spars erected at certain distances. On the east side of the circle, about the fourth part of the house was open, the other three-fourths entirely closed. A round pointed roof covered the whole in the form of a tent, well thatched with long reeds, or with the straws of the holcus. From the centre to the back part of the house, a circular apartment is made off, with a narrow entrance into it, where the head of the family takes his nightly rest; the other members of the family sleep in the fore part, or between the large and small circles of the house. All the houses were enclosed by pallisades; and the space between these and the dwelling serves for a granary and store for their grain and pulse. These granaries were constructed in the form of oil jars, of baked clay, the capacity of each being at the least two hundred gallons; and they were supported on tripods, composed of the same material, which raised them about nine inches above the ground. They were covered with a round straw roof erected on poles, and sufficiently high to admit an opening into the jars, the upper edges of which were from five to six feet from the ground.' p. 115.

The state of society may be gathered pretty accurately from what our author relates concerning the women, who, as is usual in savage communities, performed all the drudgery of the family.

'They not only performed the task of breaking up the ground with a kind of hoe made of iron, and afterwards planted it, but they constructed

structed their habitations, and collected the materials that were necessary for the same. They reaped the grain, cleared it from the husk, and laid it up in the granaries, which, with other earthen pots and wooden vessels, were the work of their hands. The men prepare the skins and hides which serve for shoes, and make them up into cloaks for themselves, their wives and children; they attend also the cattle, milk the cows, and hunt the antelopes and other game, with a weapon called the Hassagai, which is used also in battle.' p. 116, 117.

Our author has a peculiar theory, which we think by no means void of probability as to the origin of the Kaffers. He thinks that they are the descendants of a tribe of Beduin Arabs; and supports his opinion by a reference to their pastoral habits, their hospitable manners, their tent-shaped houses, their practice of circumcising, and, above all, their physiognomy. He is persuaded that the Kaffers extend farther to the northward than is generally believed, and supposes that a line drawn from the 24th parallel of south latitude on the east coast to the 20th on the west, would separate the Kaffers from the Negroes. The Portuguese, whose settlement of De la Goa borders on their country, have never ventured to introduce the slave trade among them. To the north of the Booshooanas, the commissioners were informed, that a much more powerful tribe lived in a cultivated tract of country, under the southern tropic; they are called the Baroloos. Their manners are kind and simple; they are acquainted with the art of smelting copper and iron, for which they have furnaces erected; they are extremely rich in cattle; their lands and houses are much better than those of the Booshooanas; and their chief town was represented as so extensive, that it was said to be a day's journey in length, and extremely populous. Information was received from a Portuguese slave-merchant, that the Portuguese have a direct communication across the continent, from Loango to Mozambique, for the purposes of trade, the staple of which is slaves; and that negro-merchants are established in different parts of this long route. This confirms a statement given, we know not on what authority, by Mr B. Edwards, in the second volume of his *History of the West Indies*.

Upon all this interesting information, we have two remarks to offer. In the *first* place, why have the two commissioners, who saw so much more of the interior of Africa than any preceding travellers, not published any account of their discoveries? We call upon those gentlemen, Messrs Sommerville and Trutter, to gratify the very just curiosity of the public on this point. We would also suggest to the African association the expediency of attempting to penetrate still farther towards the north by the same route.

route. It is evidently much more safe and accessible than the track by the west coast; for the traveller has no Moors to encounter, and can suffer little or no inconvenience from the effects of the slave-trade. *Secondly*, We must entreat the attention of our readers to the singular coincidence of all the information now obtained, with that procured from the African travellers to the north of the line, regarding the superior civilization of the *interior* of this unhappy continent. It is the peculiar fate of Africa to have its progress in improvement repressed by the crimes of distant nations on all its coasts. The Mahometans on the east and north: the Portuguese on the south-east; the Dutch on the south; the English, French, Dutch and Portuguese on the west—have all, in their several departments, kept the coasts of that vast region in barbarism and darkness. As we penetrate towards the interior, from either of these quarters, we find that darkness gradually dispelled, and a faint ray of civilization beginning to dawn. Entering from the west, we find the negroes, as we advance, become more numerous, more wealthy, more cultivated and more refined, as soon as we pass the peculiar region of the slave-trade. Entering from the south, we have no sooner passed the boundaries of the Dutch boors (who hold all the natives of that quarter in a state of pitiless subjection), than we find large and populous cities, a country cultivated like a garden, and a fine race of people, possessed of the more difficult arts of life. To the north of this happier district, there runs a line of country desolated by the slave-trade; and as we approach it, the Kaffers, though still free, begin to degenerate. (*Vide Barrow, p. 118.*) When this line, through the narrower part of the continent, is crossed, we again come among more improved tribes, provided we keep in the inland parts, and do not approach the haunts of civilized and Christian strangers.—The moral of all this we leave to our readers.

We are now to consider the principal subject of this volume—the importance of the Cape as a colonial establishment to Great Britain. Its value is discussed by our author in four points of view—as a military station—as a naval station—as a commercial station and port of outfit for the fisheries—and as a territorial acquisition. We shall briefly view it in these four lights.

I. The central situation of the Cape, as well as its physical circumstances, peculiarly adapt it both for a *dépôt* of formed troops, and a station where they may be formed. Its distance from South America is the voyage of a month; from Guiana and the West Indies, six weeks; from the Red Sea, six weeks; from England and from India, two months. The climate is so favourable, that invalids from India recover there with surprising rapidity.

dity. While we had the settlement last war, and kept there a garrison of more than 5000 men, there was actually no occasion for an hospital Staff, and it was accordingly broken up. It is well known how extremely fatal long voyages are to raw troops; and nothing can be more advantageous than such a station (half-way between England and India) for seasoning our recruits on their way thither. The two boy regiments, carried out in 1799, arrived there in a most sickly condition, and, at any rate, were mere raw recruits, unfit for service. In two years they became as fine a corps as any in the British service. A residence at the Cape has been found so much to invigorate the constitution, that the regiments sent from thence to India and Egypt, last war, sustained, without loss or inconvenience, both the passage, and the climate, and the service, immediately on their arrival. It is also well known how important to the event of the war, the large detachments proved, which were sent at a moment's warning from the Cape to India and Egypt. Our author justly states, that recruits can at all times be sent out, with peculiar safety and cheapness, in small numbers, on board the outward-bound Indiamen, private traders, and whalers. The importance of the Cape as a station from whence Egypt may be attacked, and the passage of the enemy from thence to India obstructed, deserves peculiar attention. If the French are in possession of Egypt, and design to ship an army from Suez or Cosir for India, the securing of the small island of Pelmi, which commands the Straits of Babelmandel, and has a commodious harbour, might be speedily effected by a small force from the Cape, and would be by far the surest and cheapest method of keeping the French force destined for India in check. Indeed our author proves, very satisfactorily, that so long as we have Malta and the Cape, the two keys of India, in our possession, we need not fear any force which our enemies can send against our invaluable Eastern empire. He also shows how easily the Cape might be taken, and kept by a small force; and argues, that the Dutch are so little anxious about keeping it, that they would at different times have sold it for a small sum of money.

To this last deduction we have some objections to urge. It is no less than a contradiction in political reasonings, to say that your enemy, or the submissive allies of your enemy, will easily give up what is of such vast importance to your power and wealth as the Cape is here proved to be. The Dutch, too, must be blind indeed, if they do not quickly perceive the immense benefits which, by a wise system of colonial policy, they might derive from this important settlement. It is true that, hitherto, it has rather been a burden than a gain to their treasury.

But its management has been the worst that can be imagined. Its growth has been studiously checked by every baneful regulation which the monopolizing spirit of their East India Company could suggest. It was reduced to a mere half-way house, and prevented from benefiting by its situation, lest, instead of being a place of refreshment to the Company's ships, it should become a flourishing settlement, and a rival to their trade. A restriction was actually enforced, which prevented the population of the country from increasing; for the grants of land were not subdivisible, and no person could settle within a certain distance of another planter. No wonder, then, that such a miserable colony should prove burdensome to the mother country, which was thus, under the semblance of maintaining a settlement, paying for the accommodation and for the monopoly of the East India Company. But a wise policy, the creation of a free port, the more liberal treatment of the Boors, an encouragement to settle there, a better system of administration, the introduction of Chinese labourers, and a variety of other improvements which may be easily imagined, and many of which have frequently been under the consideration of the Batavian government, would speedily render the Cape a rival to Batavia and Guiana—a possession, as well worth keeping for its own sake, as to prevent the benefits which the enemy of France and Holland must quickly reap from it. Holland knows full well, that, in her circumstances, there is no salvation, certainly no renovation for her strength, but by a wise recurrence to the system of colonizing. This is her policy, more than that of any other European power; and as nothing but the thralldom in which she has lately been kept, and which naturally discourages her from sowing what another may reap, could have rendered her deaf to such loud calls of obvious policy—so, any approach towards independence will certainly be attended with a recurrence to the system now sketched out. It cannot be dissembled, then, that on every account both she and France will throw various difficulties in the way of that plan which so many invincible reasons force upon England; and that the retention of the Cape, in concluding a treaty of peace, will be opposed by numerous obstacles for which our author has made no allowance.

Under the head of military advantages, Mr Barrow mentions as a very obvious one, the great cheapness of provisions—inso-much, that at the Cape, alone, can our Government maintain troops without the loss arising from the inadequacy of their pay to support them. Government indeed gains, according to our author, a clear profit; that is, if we rightly understand him, Government deducts as much from the pay of the troops as would

would subsist them in a dearer country, for example at home, and feeds them at the Cape somewhat cheaper. The fairness of this practice depends exactly on the contract originally entered into with the men. If they ought to be paid in money, and not in kind, the gain is at their expence.—But another source of revenue is stated, so extraordinary, that we must take some notice of it. The colonial paymasters drew bills on the paymaster-general at home, and these bore a premium of 20 *per cent.* at an average. The Government, therefore, derived a profit upon the bills, equivalent to this per centage; and credit is taken for such a profit on the whole expenditure while the Cape was in our possession. We question if so gross a blunder was ever made before. Government issued bills, and the colonial currency, being depreciated, was 20 per cent. worse than those bills. The troops were paid according to the colonial currency, and the provisions were bought according to it also. As to the provisions, this is only restating the *item*, formerly noted, of cheapness; for it signifies nothing what the relation was between goods and colonial currency, when Government had to buy a certain quantity with its own bills. As to the pay, which the men received in colonial currency, this is indeed a strange transaction; and what Mr Barrow is pleased to term a profit on exchange, becomes a per centage levied on the mens pay—it was in fact paying the army with debased money. It is very clear, that, consistently with fairness, Government could never derive a profit from exchange, unless by becoming bullion merchant, and receiving the profits of exporting specie. All the other part of difference of exchange consists in the depreciation of our currency; and to profit by this circumstance is exactly to defraud the creditor. But Mr Barrow does not stop here. Government, it appears, issued copper money with a profit of cent. per cent. L. 4000 were sent out in penny pieces, and were circulated in the settlement for twopenny pieces; and hence, says this eminent financier, there accrued a profit of L. 4000. ! This is exactly the operation which we have been accustomed to call raising the denomination of the currency; and, admitting the copper and English bills to have been on a par, the rise thus made was in fact 80 per cent. The soldiers were, if paid in copper, defrauded to this amount, besides a proportion of the remaining 20 per cent. equal to the nominal difference between the exchanges. We do sincerely hope that this statement arises from the author's marvellous ignorance of the subject, and is not founded in fact. He likewise takes credit for a sum as the interest of 50,000*l.* of paper money, circulated by Government, and not redeemed for seven years. But all this is too absurd to

detain our readers any longer. We never yet saw a budget like Mr Barrow's Cape budget, by which he blunders into a profit of above 153,000*l*. But if it is consistent with fact that those things were committed, Mr Barrow's ignorance is by much the most harmless part of the business; at any rate, the facts require explanation, and Government cannot give it too soon or too fully.

II. As a naval station, the importance of the Cape deserves equal attention. Although no ships in the world can so easily perform the whole East-Indian voyage without stopping half way, as the vessels of our own nation; yet, in certain circumstances it is necessary, even for them, to have such a place of shelter and refreshment as the Cape. In the homeward-bound voyage, the stress of weather which ships meet with on L'Aguilas Bank, renders it very often expedient to call at some friendly port to refit. During war, the Company's ships are in part manned with Lascars; and these men, it is well known, cannot possibly endure so long a run as from India to Europe. Vessels carrying new troops, or crowded with soldiers of any description, are equally incapable of making the whole voyage at once. Besides, the constant accidents of sea voyages render a friendly harbour, in a central position, the most valuable of all acquisitions to a country whose maritime concerns are so very extensive as those of England in the southern and eastern seas. It deserves also to be considered, that half the tonnage will do for provisions, if the ships can be completely victualled half way: and no place is better adapted for this purpose than the Cape.—In the same division with these circumstances, our author dilates on the advantages of having a station which commands the entrance to the Indian seas, and which has a ready communication with the rest of the world, with Egypt, the West Indies, &c. It is evident that all this fell properly under the first head, where he *prelected on its importance as a military station. Accordingly, there is a great degree of repetition in the second branch of the argument; and we think that, besides the statement which we have just abridged, it contains nothing peculiarly referable to the head of naval advantages, except the circumstance of the Cape forming a convenient port of outfit for privateers and frigates to annoy the enemy's Indian trade.

This second head involves also some disputable points. We cannot imagine, for example, upon what our author founds his opinion, that all other nations should be most willing to see the Cape in other hands, because, *from the general policy of England, and the favourable circumstances in which her commerce and navigation are now placed, the Cape, in her possession, would

would always be open to foreign shipping, and refreshments supplied to them on equal terms as to her own.' (p. 233.) Does Mr Barrow allude, here, to the equal terms on which foreigners are permitted to share our Indian trade, or to the liberal policy which opens that lucrative commerce to all our own countrymen? or does he refer particularly to that free system of universal traffic, commonly known by the title of the 'Navigation Act?' or has he more immediately in view the state of perpetual peace which this country has for centuries enjoyed? or is it the practice of abstaining from all maritime blockades, and searches for contraband, which has marked our proceedings towards foreign powers, that gave rise to the patriotic effusion above quoted? Surely, if Mr Barrow had not written his book in a quarter of a year, he would have discovered that some nation, seldom engaged in warfare, and unconnected with either East or West Indies, is the proprietor whom the European world in general should wish to see possessed of the Cape. It is enough, in this place, to prove its value to England. Mr Barrow undertook too much, when he betthought him of proving that other nations also should sympathise with his very proper feeling for his own country.

He concludes his second division of the subject, by stating the natural difficulties attending the possession of the Cape, in a naval point of view. These are indeed very formidable, and they arise chiefly from the badness of the harbours, and the constant high seas that prevail at the southern promontory of Africa. But after considering them all, and coupling this statement with that of the inestimable advantages derivable from the possession in a naval point of view, we are fully prepared to agree with our author in his conclusion, that 'with all the imperfections of this southern angle of Africa, with regard to its bays and conveniences for shipping, its geographical position on the globe will always render it a powerful instrument in the hands of a maritime nation, to direct the commerce of India and China into new channels, to enrich its owners, and to distress their enemies.' p. 264.

III. The Cape territory furnishes various articles of value for consumption and exportation. Of these, the staples are grain, particularly a wheat, of a small kind, which yields sometimes eighty for one,—and the produce of the vineyard; than which, nothing can be more luxuriant, even in the present wretched state of its culture. Besides these staples, the vast herds of excellent cattle, together with good bay salt, produce all kinds of dairy articles, as well as salt meat, tallow and hides, in great abundance and perfection. There are other products of inferior value to swell the list; as aloes, ivory, fruits, wool, and tobacco.

But the consideration chiefly deserving our notice, under the head of commercial advantages, relates to the policy or impolicy of allowing other nations to share in the trade of a settlement so well adapted to become a depôt of Indian and European commodities. And our author particularly discusses the effects likely to result to England from any arrangement which should constitute this settlement a free port. If the foreign nations, who at present resort to the London market for East India goods, under all the puzzling circumstances of drawbacks, &c. which arise out of the complicity of our customhouse laws, possessed the power of purchasing at the Cape, our author conceives they would prefer this traffic *cæteris paribus*. The Americans, we know, profit next to ourselves by the India trade, as it stands at present. How much more advantageous would the shorter voyage to the Cape prove to them, when it is certain that even now they can undersell us in the West India market for Asiatic goods? British capital, too, would be embarked in vessels trading under foreign flags, to the infinite detriment of the present system. Upon all this we have only one remark to offer—Our author's argument is addressed to the East India Company exclusively; and the only inference deducible from it is, that the Company's interest is incompatible with the freedom of the Cape as an emporium. If that important settlement were to become the Tyre or Alexandria of modern times, who can doubt that the whole world, and Great Britain most, in proportion to her greater commercial stake, would benefit by so splendid a creation? Tyre and Alexandria!—That is not enough,—those ancient marts were nothing to what the Cape might be made, open as it is to the New as well as to the Old World—to the treasures of the Antilles and Peru, as well as to all the riches of the East. From such a prospect, what advantages do not instantly rise before us to this country? Possessed of all the Indian, and so much of the western world, we must infallibly be the chief traders with the new emporium. And can any thing be more obvious than the ease with which we could monopolize its supply from a large portion of Asia and America, without contracting our market for fear of interference? What mighty advantages would thus accrue to all British India, and to our extensive possessions in New Holland, as well as to the continent of Africa itself?

Our author also states the comparative advantages and disadvantages of making the Cape an entrepôt for Indian produce, under the East India Company's direction. He supposes that this would lead to what he terms, 'a diminution of his Majesty's customs' (p. 275.), and that it would deprive the London market of the supply, at present furnished to foreigners, of such articles
(not

(not Indian) as they take from finding them ready assorted, when they are laying in their East Indian cargo. He does not think it enough to suggest the right answer to this, which is evidently, that our produce would naturally be sent to the Cape, if it did not find another vent; but he enters into a needless, and we think a very incorrect statement, of the full competency of the East India Company's trade to supply the Indian market, and the inability of private traders to interfere in it, even to the amount of the tonnage allowed by the Company's charter. This statement is taken from the reports of the directors; and we think it is more than of suspicious authority. But an emporium, destined to thrive, like Tyre and Alexandria, under the direction of the committees in Leadenhall Street, is to our minds a contradiction in terms, as much as the idea of a sensitive plant growing to luxuriance and beauty under the pressure of a millstone. Charters of monopoly are not fitted to aid the growth of commercial cities, in which the monopolists do not themselves reside; and indeed the continuance of the Company in their mercantile functions, seems to us equally incompatible with the increasing prosperity of the Cape, and with that of their present dominions.

In order to perceive the benefits that must result from such a station as the Cape, in subserviency to our southern whale fishery, we have only to recollect its relative position to the seas where that fishery is carried on, and the great abundance of whales which swarm in the seas round the south coast of Africa itself. Without any farther statement of the facts referable to this branch of the argument, we may safely conclude with Mr Barrow, that

—'the Cape might be rendered essentially useful to the southern whale fishery, so important to the commerce and navigation of Great Britain; but that, during war, the same place in the possession of an enemy may be the means of obstructing this valuable branch of trade, and must at all events render it forced and precarious.' p. 322.

IV. We come now, in the last place, to view the Cape as a territorial acquisition. And here we must remark, that Mr Barrow's argument branches into a diffuse statistical and topographical detail, while the most material points of fact that bear upon the question might have been concisely enunciated; and the description should evidently have formed an introductory dissertation, equally applicable to all the other heads of the argument. The population of the colony, in 1798, consisted of 21,746 Christians, 25,754 slaves, and 14,447 Hottentots, scattered over so large a space as left only one person to two square miles. Much of the soil is sandy and barren for want of water; but in many parts the land is highly fertile. Butchers' meat and grain, as well as wine and fruits, might be had in great abundance and cheap-

ness, under a more liberal system of police; and our author concludes with suggesting some improvements, well worthy the attention of whatever mother country this important colony may be destined to belong to. We extract the following speculation upon a most interesting topic, and venture to pronounce it, in spite of its apparent impracticability, equally solid and ingenious:

‘Before any considerable degree of improvement can be expected in those parts of the country, not very distant from the Cape, it will be necessary, by some means or other, to increase the quantity and to reduce the present enormous price of labour. The most effectual way, perhaps, of doing this, would be the introduction of Chinese. Were about ten thousand of this industrious race of men distributed over the Cape district, and those divisions of Stellenbosch and Drakenstein which lie on the Cape side of the mountains, the face of the country would exhibit a very different appearance in the course of a few years; the markets would be better and more reasonably supplied, and an abundance of surplus produce acquired for exportation. It is not here meant that these Chinese should be placed under the farmers; a situation in which they might probably become, like the poor Hottentots, rather a load and an incumbrance on the colony, than a benefit to it. The poorest peasant in China, if a free man, acquires notions of property. After paying a certain proportion of his produce to the state, which is limited and defined, the rest is entirely his own; and though the Emperor is considered as the sole proprietary of the soil, the land is never taken from him so long as he continues to pay his proportion of produce to Government.

‘I should propose, then, that all the pieces of ground intervening between the large farms and other waste lands should be granted to the Chinese, on payment of a moderate rent after the first seven years. The British government would find no difficulty in prevailing upon that, or a greater number of these people to leave China; nor is the Government of that country so very strict or solicitous in preventing its subjects from leaving their native land as is usually supposed. The maxims of the State forbade it at a time when it was more politic to prevent emigrations than now, when an abundant population, occasionally above the level of the means of subsistence, subjects thousands to perish at home for want of the necessaries of life. Emigrations take place every year to Manilla, Batavia, Prince of Wales’s Island, and to other parts of the eastern world.’ Vol. II. p. 430, 431.

The abstract which we have attempted to give of the argument upon this very important question, will probably enable our readers to form a definite judgment on its merits. We have seldom attended to a discussion in which all the reason seems to lie so entirely upon one side. That the Cape ought never to have been ceded—that it ought as soon as possible to be regained—and that no inducement ought to make England part with it at another treaty

treaty of peace, are positions proved to a demonstration in the work now before us, and recommended to our statesmen with all the force of obvious necessity. One farther consideration, not hinted at by Mr Barrow, has great weight in our minds. If we do not make war in one point, we must in another; if we do not attack the Cape, we shall probably attack the Dutch and French settlements in the West Indies:—And, that such a policy is unwise in the extreme, who can doubt, that knows any thing of colonial affairs? The conquest of Guiana, last war, enriched the Dutch planters at our expence. Our capitalists poured into their service above sixteen millions in loans, tempted by the profits on consignments, which, after the restitution of the colonies, they could no longer receive; and now, in order to obtain even the trifling interest of the Dutch money market, and to prevent their debtors from breaking, thousands after thousands of pounds must be sent over to prop the credit of the Dutch planters, while our own colonists cannot raise a shilling on good security. The enemy knows this golden rule, and allows us to take his starved concern off his hands;—he is sure that we shall restore it in the best possible condition. But *we*, whose fate it always is to pay the reckoning, must continue war after war in the same train of dupery; and, not content with paying all our allies in Europe for defending themselves, we must needs bestow donations upon our enemies in the form most acceptable to his wishes and wants. We are happy to think that there is some chance of such fatal impolicy being at last abandoned; and we rejoice in the wholesome substitute which the Cape furnishes for it. To the author of the present work, much gratitude is due. We only lament that his imperfect knowledge of political science, and his unfortunate hurry of composition, has prevented our obligations from being so large as his natural acuteness and happy opportunities were calculated to make them. This work, with all its imperfections, is a valuable addition to our knowledge, and must tend materially to benefit both the speculative and the practical part of the political world.

ART. XVI. *The Synonymes of the Latin Language, alphabetically arranged; with Critical Dissertations upon the force of its Prepositions, both in a simple and compound state.* By John Hill, LL.D. Professor of Humanity in the University, and Fellow of the Royal Society of Edinburgh. 4to. pp. 782. Printed by James Ballantyne, for Longman & Rees, London; and Manners & Miller, Edinburgh. 1804.

A QUARTO volume of Latin synonymes, ushered into the world by the Professor of Humanity at Edinburgh, could not fail to

to excite in us the greatest possible interest and expectation. The situation, so long and so ably filled by the learned author, made us rejoice at the opportunity thus offered to him of displaying to the world the soundness of his erudition, and the acuteness of his criticisms. We looked forward to him for the illustration of many doubtful passages in those authors who have been regarded, for ages, as the standards of correct taste and literary excellence; we anticipated much curious information concerning the original signification of words, and their several subsequent varieties and modifications; and we expected to be shown how terms which, at first, were appropriated to express particular customs, superstitions, and laws, came gradually to acquire a more extensive signification, and served at last to embellish the general declamations of the most celebrated poets, historians, and orators of ancient Rome.

We will confess, too, that our national vanity was flattered by the annunciation of this work; we hailed it as likely, on the one hand, to furnish the best answer to the aspersions (if those can be called aspersions which are only employed in the way of fair and honourable emulation) thrown out against us by our southern neighbours for our neglect of classical learning; and, on the other hand, as a work which would well illustrate the utility of our more favoured studies by an application of metaphysical principles to the general theory of grammar. It was pleasant, at the same time, to reflect, that the materials for such a work were abundant, and by no means difficult of access. Although no remains of the etymological labours of Julius Cesar are extant, still the acuteness of a writer on this subject would be much aided by whatever of the precious fragments of Varro have been handed down to our times, by the critical discussions on the force of words every where interspersed in the works of Cicero and Quintilian, and even of Seneca and other writers, who, towards the decline of the Roman Empire, turned their attention to philological pursuits. Much, too, might be collected from the works of the learned civilians; much from the labours of Servius, Priscianus, Sannazarius, Scaliger, Vossius, and the innumerable host of commentators of the middle and later ages. The last century, above all, produced the *Thesaurus* of Gosner and of Facciolati; works of so comprehensive a nature, and executed with such indefatigable industry, that it may not perhaps be too much to assert, that if every other book on the subject had perished, these two alone might have supplied all the materials for an excellent treatise on Latin synonymes.

It is not by any means our intention, however, to insinuate that the task of composing such a work would be easy. The difficulties

difficulties attending the execution of it are unquestionably formidable; and the mere fact of its being a dead language presents the greatest of obstacles. We know the mistakes to which every one is liable who attempts for the first time to speak any of those languages of modern Europe which he has previously known only from books. A little consideration will convince us, that these difficulties arise principally from the impossibility of seizing the nice differences and shades of meaning which the same words are capable of bearing in different situations; in a word, that they originate chiefly from the want of an intimate acquaintance with the synonymous terms of the language. As this is a difficulty which can scarcely be surmounted without the assistance of frequent colloquial intercourse, it is obvious that it must prove almost insuperable in the case of a language which has long ceased to be spoken, and where we cannot have recourse to the aid of conversation to resolve our doubts and rectify our mistakes. Nor are these difficulties in any way diminished by the consideration that the language in question ran a longer career than most others with which we are acquainted, and participated in the progress of a people who extended not only their dominion but their laws and customs over the greatest part of the civilized world. Should it be suggested that those writers, however, on whose authority alone we could rely, all existed about the same period, and consequently that the sphere of our inquiry need not be extremely extensive, it may easily be replied, in the first place, that from them alone we should never be able to trace that historical progress of the language by which alone its significance is often determined; and, secondly, that the writers alluded to, contributing by their own exertions to the refinement and perfection of their language, indulged in so wide a range of metaphorical expression, that a thorough acquaintance with the military discipline, the civil and religious institutions of the Roman people, is indispensably necessary for those who wish to feel the full force of the synonymous and figurative expressions which abound in the compositions of the purest writers of the Augustan age.

But if Dr Hill had to encounter considerable difficulty in digesting the matter of such a work, he had every advantage and facility, we think, in reducing it to order and form. A treatise on synonymes was no longer a novelty in the literature of Europe, nor could the author of it be at any loss how to employ and dispose his materials in such a way as to insure the approbation of the public. The Abbé Girard alone has the merit of originality in this respect. His book has professedly served as the model for all the authors who, since his time, have written on similar subjects.

jects. In his own language he has been followed, and in some respects surpassed by Rouland. A book also on the synonymes of the Italian language was published at Parina, A. D. 1778, by Alessandro Maria Bandiera; and what is more to our purpose, M. Dumestil, a professor in the university of Paris, has given to the world a book entitled, '*Synonymes Latins, et leurs différentes significations, avec les exemples tirés des meilleurs auteurs, à l'imitation de M. L'Abbé Girard.*' This, though not without its faults, may be considered as a prototype, in many respects well worthy the imitation of succeeding writers. Supposing, however, (which we scarcely can suppose), that Dr Hill was ignorant of the existence of Dumestil's book, still, from his own confession, he was no stranger to that of Girard, and the truth is, that however the original author of a work on synonymes may be deemed inferior to Rouland in the profoundness of his learning and the solidity of his arguments, he stands (and probably ever will stand) unrivalled for the perspicuity of his style, the neatness of his illustration, and for the happy faculty he possesses of keeping alive the attention of his reader, and mingling entertainment with his instruction.

Unfortunately for us, our learned Professor has not imitated the excellences of Girard's work, even where they were most open to his imitation. Instead of contenting himself with a clear and concise definition of all the words he has undertaken to distinguish, Dr Hill, by constantly aiming at subtle and comprehensive disquisitions, so confuses and bewilders himself, that it is frequently dangerous to attempt to follow him through all the mazes and windings of his intricate course.

Ne labyrinthis e finibus egredientem

Tecti frustraretur inextricabilis error.

The nature and extent of the faults into which he has fallen will be best judged of, however, by an examination of the work itself. We may begin with the Preface.

After giving us some useful advice concerning the *delicate management of a young philologist*, our author proceeds to inform us, that in order to make his views intelligible on a subject to which few grammarians have as yet paid the attention it deserves, he shall

— 'first state precisely what he means by synonymous terms, and then shew the causes of the ambiguity they sometimes occasion, together with the means by which this may be removed.

'The word synonymous (he adds) is supposed to be applicable to such terms only as denote precisely the same conception. Though this use of it be *legitimate and consistent with its etymology*, it must not be understood to be its only one.' p. iii.

Here, by the way, we may ask how this use of it is consistent with

with its etymology. Scaliger was of a contrary opinion, when, after citing *ensis*, *spatula*, and *gladius*, as terms which, in the general acceptance of the world, were called synonymous, he adds, 'Græci hæc πολυωνυμα, quidam et nostris συνωνυμα falso—fortasse autem rectius locuti essent Græci si μωνωνυμα appellassent, quæ solo nomine extarent indicantia res diversas.'

But to return to our author. 'Some words occur, in the different languages, so strictly equivalent, that their meaning is not to be distinguished.' (p. iii.) It is not without some difficulty that we can assent to this proposition, when we recollect with what learning and ingenuity Scaliger and Sannazarus have maintained that there are no two words in the Latin language that have exactly the same signification. For our parts, however, we are inclined to think that many terms come to be nearly or altogether synonymous in the progress of language, though we are perfectly persuaded that each of them had originally a distinct signification, and either represented a different object, or suggested the same object by its relation to different ideas. In succinctness of speech, therefore, we cannot admit that there are any words exactly equivalent in meaning, though there are many undoubtedly that may be usually substituted for each other. The parent stock of synonyms are those great families of tropes and figures, by the multiplication of which, language becomes abstracted and refined; and in these it is always to be recollected, that there is a direct and original meaning, besides that which is adventitious and metaphorical. This secondary meaning is sometimes imperfectly established, and sometimes the word continues to perform both functions with equal propriety. Thus, when Homer uses the expression (*Iliad* 8 164.) *Ἐπὶ κακῇ γλῶσση—γλῶσση* is admirably employed as a synonymous term for *Κωρε*, a word for which, in its primary sense, it could not be substituted. In like manner *impedimentum* is in one sense synonymous to *mora*; in another, when, for reasons sufficiently obvious (being perhaps one of the most expressive words in any language), it signifies the baggage of an army, it may be substituted for *sarcina*.

Dr Hill goes on:

'The multiplicity of such terms' (viz. words strictly equivalent) 'increases the harmony of speech, and gives the poet and the orator an advantage in the practice of their respective arts.'

But, although this copiousness may, when in a certain degree, be an article of superiority, yet it is possible for it to degenerate into a hurtful redundancy. The steadiness of men's conceptions may be shaken by a superfluous variety in their signs, and obscurities created by the abuse of a number of these, as well as by a scarcity. Were a redundancy of this kind to pervade a language completely, the same people might be said to speak, at least, two languages at once. *Though the established*
syntax

syntax might apply equally to every set of terms, yet the unmeaning multiplicity would only prove the folly of those who formed it. p. m.

This passage is so contradictory, and so confused, as, at first sight, to appear almost unintelligible, the meaning, however, it was intended to convey, may be readily discovered in an extract from a celebrated French grammarian, which Dr Hill seems to have been willing to borrow; 'Celle variété de mots met dans le discours beaucoup d'embarras, et de richesse; elle est très incommode pour le vulgaire et pour les philosophes qui n'ont d'autre but en parlant, que de s'expliquer clairement; elle aide infiniment au poëte et à l'orateur en donnant une grande abondance à la partie matérielle de leur style. (*Des Brosses sur la formation des langues.*)

He is not much more perspicuous, however, when he trusts solely to the light of his own genius for his direction. In portraying the character of the *good grammarian*, he tells us, that

—'he (the grammarian), ~~for~~ all men, has least right to be arrogant; because, from the nature of things, it is impossible but that he *must imperfectly execute the task imposed upon him.*'

And soon afterwards he puts the finishing stroke to the portrait of the said good grammarian, by stating,

—'he has a right to suppose that the combination, *in respect to each mass of matter*, to whatever use it has been turned, has been duly ascertained. To the most correct use of the term he requires a rigid adherence, and he pardons *neither the inaccuracies that spring from dulness, nor the innovations that spring from conceit.*' (p. viii.)

In an elaborate panegyric on the *purest writers*, he describes them, in one place, as 'sneering at the fetters with which severe critics would bind them,' and, in another place, 'as *having forgotten*, in the glow of composition, the standard they had established.' Nevertheless, we are informed in the sequel, that 'they *never had lost sight*, of the distinctive character of the term, and, *that the seemingly anomalous expression may be reconciled with what is primary.*' (p. xi.) Thus pure writers are allowed to forget, in the glow of composition, that which has never been out of their sight!

The ninth page commences with the following extraordinary sentence:

'By means of this, the nominal essences of substances, which alone can be laid hold of.' &c.

We do not pretend to understand exactly what the nominal essence of a substance is; but we will venture to assert, that if a substance hath any component part, any quality, relation, or affinity, which it must be particularly difficult to *lay hold of*, its nominal essence must be the most impalpable. We cannot help regretting, indeed, that Dr Hill should not have thought it worth his while to take a little more pains than he seems to have done

done with the style of these introductory observations. There is a great want of perspicuity throughout, and very many deviations from the rules of correct composition. We do not lay much stress on the many clumsy expressions which every where occur: as, for instance, '*Every sign has its own conception*'—'*No difference is at sometimes perceived*'—'*Before admitting* the justness of this remark,' &c. &c.—though we fear our English readers will class them under the general head of Scotisms. We have remarked, also, that he sometimes falls, as it were, under the dominion of a word: Thus, in the course of fourteen pages, we find mention made of *delicate* management, *delicate* variety, *delicate* analogies, *delicate* signs, and *delicate* beauties. This expression, however, is evidently borrowed from certain French writers on this subject.

We have dwelt the longer on this part of the work, because it furnishes an excellent specimen of the style which the reader may expect to encounter, should he continue his course through the remainder of the volume; and we have done this the rather, because we think that an author, who pretends to point out the nice distinctions of language, ought to be peculiarly attentive to the purity of his own expressions: if these appear in the outset to be unusually inaccurate and confused, he cannot complain if the reader should call in question his competency to execute the task he has undertaken.

Though Dr Hill has candidly allowed that his list of synonyms may be capable of addition, he nevertheless boldly asserts, 'that by far the greatest number of Latin words that can be justly opposed, are to be met with in this collection' (Preface p. vi.), and the size of the book appears, no doubt, to warrant this assertion; but a close investigation of it will shew that the omissions are really one of its most characteristic faults. Synonymous words, obvious to the merest schoolboy, are unnoticed; as, for instance, *Regnum, Imperium, Dominium—Vultus, Os, Facies—Sermo, Oratio, Loquela—Trepidatio, Terror, Horror, Timor, Pavor—Imas, Inferus, Infimus—Esis, Gladius—Simul, Una—Antiquus, Vetus, Vetustus—Crimen, Delictum, Culpa—Poculum, Cyathus, Scyphus—Tutus, Securus—Nomen, Vocabulum—Coma, Crinis, Capillus—Collis, Clivus, Mons, Tumulus—Lenis, Mitis, Suavis, Mansuetus—Mare, Pelagus, &c. &c.* When words of this stamp are omitted, we cannot be astonished that no names whatever are inserted, such as *Cynthia, Diana, Phæbus, Apollo, &c.*, and that there are few words included, which by their explanation would serve to illustrate the civil and military institutions of the Roman people. Accordingly, we find no mention made of *As, Hereditas—Accensus, Lictor—Manipulus, Legio, Cohors—Tutor, Curator—Epistola, Litteræ, Rescripta,*

Rescripta, Codicilli—Mancipium, Nexus—Usucapio, Ususfructus—Possessio, Pecunia, Peculium, Argentum—Adoptio, Arrogatio—Iter, Actus—Codex, Testamentum, Cera. To multiply examples would be tedious. Suffice it to state, that some *hundreds* might be added to this list. As a proof of this, we shall only observe, that Dr Hill, (exclusive of his prepositions, which are thirty-three in number) has only 338 heads (if we may be allowed the expression) of synonymous words; whereas M. Dumesnil's book contains 2538. We will admit that the last mentioned writer has classed together many words which are not in any sense synonymous; but Dr Hill has been guilty of the same fault (as in *Vicus* and *Villa*, *Abnormis* and *Enormis*, *Favilla* and *Scintilla*, *Ejurare* and *Abjurare*, *Cælebs* and *Innupta*, &c.) and nearly in the same proportion. We may also observe, that M. Dumesnil's heads are infinitely more copious than our author's. In one instance (that of the word *Navis*) he has gone so far as to range together 24 synonymous words. M. Dumesnil's book is also much less bulky than Dr Hill's.

Besides the redundancies and defects which have suggested the foregoing remarks, we have, in our progress through this large volume, had occasion to object—to the puerile and frivolous matter which, without any reference to the subject in question, is so frequently obtruded on the reader,—to the author's curious attempts to give free translations to several passages in the Latin classics,—and, lastly, to the manner in which he has mistaken or perverted the meaning of several Latin words. We purpose citing a few examples of all these defects, and will begin with some instances of his puerile and frivolous observations.

Thus when, to explain the force of the verb *occulere*, he cites from Virgil,

‘Spargere sîmo pingui, et multa memor occule terra,’

he favours us with his ideas on gardening, and abruptly remarks,

‘That without paying such attentions as those here recommended, the improver may lose his labour from the severity of the season.’ (p. 15.)

In p. 20. ‘Nullam a me epistolam ad te sîno absque argumento ac sententia perferre. *Cic. Ep. ad Att. l. 19.* Cicero here announces his respect for his correspondent by his attention to the letters he sent him. He was *anxious that they should be none of those silly compositions*, which, though they get the name of letters, yet, by being void of matter, are in fact not worth reading.’

In p. 23. ‘~~—————~~ æquisque vadosi

Accola Vulturæ.’

Those who know the situation of *this river* in Italy, could be at no loss to distinguish the people whose territory was bounded by it.’

In

In p. 404.

'Primum vere rosam, atque autumnum carpere poma.'

VIRG. Georg. 4. 134.

'The roses pulled by this Corycian old man are supposed to have been neither unblown nor faded, and his apples to have been neither green nor rotten.'

In p. 321. *Errare* is applied to animals grazing.

'—They direct their motion not in a straight line, and may often miss the best of the pasture they are in quest of.'

'Mille mææ Siculis eriant in montibus aghæ.'

VIRG. Ec. 2. 21.

In p. 535, after several confused observations on the meaning of *nefandus*, one of the plainest of words, he observes—'The short *e* in *nefandus* often suits the poets when the long *i* in *infandus* is inadmissible.' From this remark, however, we may collect, that our author is aware that there is a metre to be preserved in Latin verse; whereas, from the quotation he has given us from Theocritus, (p. 74.) we might almost be tempted to suppose him ignorant of this fact with respect to Greek literature. He has given us at least a reading of the passage above alluded to, which, whatever other merit it may possess, certainly has not that of being an hexameter verse.

We will now select a few instances of Dr Hill's free translations (*traductions libres* as the French would call them) of certain passages.

In p. 713.

'Hæc super imposuit liquidum, et gravitate carentem

Aëthera, nec quidquam terreæ factis habentem.'

'Ovid has supposed *Fæx* to exist in a thinner fluid than either wine or water, and referred it to particles of earth residing in pure æther.'

In p. 715.

'Strenua nos exerceat inertia, navibus atque

Quadrigis petimus bene vivere, quod petis hic est:

Est Ulubris, minus si te non deficit æquus.'

'The activity of the *Strenui* was frustrated by the unskilfulness of the *Inertes*. By an unavailing pother, no progress can be made in the most important of all pursuits: and men vainly fatigue themselves, chasing a phantom abroad, when the reality is at home.'

As if this explanation was not sufficient, in p. 594 he thus comments on the same lines:

'The poet by no means accuses men of inactivity; but he blames the *anle studium*, the unavailing pother, which comes short of the end, by either mistaking the means, or by the want of ability to employ them.'

In p. 581.

'Sic ne perdidit, non cessat perdere lusor.'

'The gamester encounters the hazard with his eyes open, and, for the

sake of an uncertain addition to his fortune, makes a voluntary surrender of the whole.'

In p. 779.

'Foenus agitare, et in usuras extendere ignotum est.' *Tacit. de Mor. Ger.* 26.—The historian says, in the first member of this sentence, that the Germans lent no money upon terms that might have been equitable, and, in the second, that they were guilty of no oppression, when relieving the indigent, by affording them the use of their property.'

In the same spirit of free translation, he informs us (p. 132.), that *devium scortum* is 'a courtesan, not entirely abandoned, and, as it were, *non in via prostrans*.' He translates *callidus* (p. 122.), 'a sort of slight-of-hand, with which the mind is little acquainted;' and *piger*, he has the goodness to inform us, is 'a disposition to sit with the arms folded,' &c. &c.

The course of our inquiry will next lead us to produce some instances of more important errors, in which we suppose him to have mistaken or perverted the meaning of words.

In p. 174, he has confounded the meaning of *caper* and *hircus*. 'These words (he says) agree in denoting a he-goat, but the former is applicable to him in a natural state, or otherwise, the latter is applicable to him only when he is mutilated.' We conceive the meaning of *hircus* to be directly the reverse, and that this word is never applied to the he-goat when he is in what Dr Hill terms his mutilated state. The real force of *hircus* is well illustrated by the manner in which it is opposed to *caper*, in an epigram of Martial quoted by our author, to prove the meaning of the latter word.

'Dum jugulas hircum, factus es ipse caper.'

Assuredly *hircus* must here be understood in a different sense from that which Dr Hill allows it to have.

In p. 18.—'Rusticus, abnormis sapiens, crassaque Minerva.' He translates *abnormis* 'slightly deviating from the common rule.' This we apprehend to be a mistake. *abnormis sapiens* means, wise without instruction, without any rule or *norma* at all, as Cicero has expressed the same idea, 'Non ad aliorum normam sapiens.' Dr Hill, we conceive, is equally mistaken as to the meaning of *enormis*, when he observes, 'that had Horace employed the word *enormis* in this passage, he would have destroyed the quality of the wisdom by the greatest implied deviation from the rule established.' The fact is, that *abnormis* means, without any standard at all; and *enormis*, differing from a given standard. When *enormis* means, as it frequently does, immoderate bulk, it is because the size of the thing spoken of greatly exceeds the ordinary measure.

Nothing can be more different from the idea we have ever entertained of the meaning of *scintilla*, than the explanation given
of

of it in p. 359.; viz. '*Favilla* often denotes hot ashes or embers, and *in* that view only is synonymous with *scintilla*.' We afterwards learn, however, that '*Scintilla* differs from *favilla* in having no reference to ashes; but then he leaves embers as the point of meaning at which these two words are synonymous. *Scintilla*, however, never can be rendered by embers, and never can be synonymous to *favilla*. The real difference between these two words may be distinctly seen in a passage from Ovid, which has been clumsily introduced by Dr Hill:

'Ut solet a ventis alimenta resumere, quæque
Patra sub inducta latuit *scintilla* 'favilla'
Crescere, et in veteres agitata resurgere vires.'

In p. 566 he asserts, that the verb *sortior*, when rendered in its strictest sense, supposes 'the acquirer to avail himself of a chance of which he was thoroughly aware;' and, as a strong instance of it, gives us the following passage from Horace.

—————'feliciem dicere non hoc

Me possum casu, quod te *sortitus* amicum.' *Hor. Sat. I. 6. 52.*

Now, we conceive *sortior*, in its primary, and consequently in its purest sense, to be 'to cast lots;' in its secondary sense, it may be used for 'to obtain by lot;' and in this last sense we understand it here; and think, if any doubt could be entertained of its meaning, it would be cleared up by the subsequent passage in the satire, '*Nulla etenim mihi te fors obtulit.*' (*Hor. Sat. I. 6. 53.*) Our reader are well aware, that the Romans were one of the most superstitious nations that ever existed, and that they left affairs of the greatest moment to the decision of chance. By the casting of lots, it was decided which of their Consuls should take the command of their armies: by the same award, it was determined who should administer the holiest offices of their religion. From a knowledge of the Roman customs in this particular, the secondary meaning of *sortior* may easily be deduced. It would naturally (it might almost be said necessarily) follow, that *sortior* would obtain such a signification as that in which Horace has here used it. Juvenal and Ovid have the word in the same sense.

—————'homines venerabile soli

Sortiti ingenium' ————— *Sat. XV. 149.*

'Tu si Mæonium vatem sortita fuisses.' *Ovid. Trist. I. 6. 21.*

We cannot enough regret, that Dr Hill never avails himself of any opportunity of explaining any of the customs or manners of that people whose language has occupied so much of his attention and research.

In p. 712 he observes, that *squalor* comes from *squama*, and supposes different masses, resembling the scales of fishes, creating the nuisance, and defiling the body. In proof of this, he adduces the following sentence from Aulus Gellius: 'In corporibus incul-

tis squamosisque alta congeries sordium squalor appellatur.' Had he examined a little more accurately the author from whom this extract is made, he would have discovered that *squalor*, in its primitive sense, means that *roughness* which characterises the scales of fishes and serpents. In this sense it is used by Virgil and others, without any reference to filth or nuisance. We will now lay before our readers the criticism on the meaning of this word, as it stands in Aulus Gellius, merely to show how wilfully our learned author seems to have mistaken the spirit of it.

'Tertium restat ex iis, quæ reprehensa sunt, quia "tunicam squallentem auro" dixit. id autem significat copiam densitatemque auri in squamarum speciem, intexti. squallere enim dictum est a squamarum crebritate asperitateque; quæ in serpentium pisciumque coriis visuntur. quam rem et allii, et hic quidem poeta locis aliquot demonstrat:

Quem pellis, inquit, ahenis

In plumam squamis auro conferta tegebat.

Et alio loco,

Jamque adeo rutilum thoraca indutus aheni.

Horrebat squamis.

Accius in Pelopidis ita scribit,

Ejus serpentis squamæ squallido auro et purpura prætexitæ.

'Quicquid igitur nimis inculcatum obtritumque aliqua re erat, ut incuteret viventibus facie nova horrorem, id squallere dicebatur. sic in corporibus incultis squamosisque alta congeries sordium squalor appellatur. cujus significationis multo assiduoque usu totum id verbum ita contaminatum est, ut jam squalor de nulla aliâ re, quam de solis inquinamenti dici coeperit.' *Aul. Gel. lib. 2. c. 6.*

In *Squalor*, then, as *Tentare*, *Sortiri*, *Chirographum*, *Condere*, and many other instances, Dr Hill has given us the secondary meaning of the term, without any reference to its primary signification. Here the mistake is the more glaring, as he gives the secondary as the only sense of which the word is capable.

In p. 43, *Blandiri* is said to differ from *Adulari*, 'in referring, not to the meanness and the variety of stratagems adopted by the flatterer, but to his constantly taking advantage of the person he means to cozen.'

We are of opinion, however, that the real meaning of *Blandiri* is to caress by the touch, as appears by a passage in Propertius, where the participle is used to signify touching gently and pleasantly.

'Blanditurque hiant per mea colla rosæ.'—*Prop. 4. 6. 72.*

M. Dumesnil has been very happy in the explanation he has given of the difference between this word and its synonymes. We will subjoin his remarks on this subject, both because Dr Hill has omitted the synonymous words opposed to *Blandus* by Dumesnil, and because we are very desirous of laying before our readers a specimen of Dumesnil's style.

'*Blandus*,

Blandus, Dulcis, Lenis, Suavis, Mansuetus, Mitis.

“*BLANDUS se dit du toucher, flattant, caressant de la main.* Lacertis blandis tenere colla. Ovid. Canes blandi. Virg. *Au figuré, insinuant.* Blandâ oratione falli. Cic. Blandæ mendacia linguæ. Ovid. Ut pueris dant olim crustula blandi doctores. Hor. *DULCIS, doux au goût.* Mustum dulce. Virg. Dulcior melle. Ovid. *Au figuré: Dulcissima epistola.* Cic. Dulcis inexpertis cultura potentis amici, expertus metuit. Hor. *LENIS, doux au toucher.* Lene et asperum. Cic. *Au figuré: Non lenis dominus.* Hor. Lene consilium. Id. Nunc lenitate dulces sumus. Cic. *SUAVIS convient à l'odorat.* Odor suavis et jucundus. Cic. *Au figuré: Suavis homo.* Ter. Suavis consuetudo. Cic. *MANSUETUS, (quasi manui assuetus) doux traitable.* Quæro cur tam subito mansuetus in Senatu fuerit, cum in edictis tam fuisset ferus. Cic. Ex feris et immanibus mites reddidit et mansuetos. Id. Lenitatis et mansuetudinis genus, cui opponitur vehemens et atrox. Id. *MITIS se dit du fruit mûr.* Sunt nobis mitia poma. *Au figuré: Patientia mitiorem dolorem facit.* Cic. Thucydides si posterius fuisset, multo maturior fuisset ac mitior. Id. *On peut opposer lenis à asper; au figuré, à crudelis; suavis à graveolens; au figuré, à tetricus; à blandus, molestus; contumeliosus; à dulcis, amarus; au figuré, à injucundus, invisus; à mitis, acerbus.*

It is quite unnecessary to remark with what distinctness the difference between the original and figurative sense of all these words is here pointed out, or the neat and appropriate examples by which their respective meanings are illustrated. Dr Hill unfortunately has aimed at moving in a higher and more difficult sphere; and has run so keenly after metaphysical and subtle distinctions, as seldom to convey more than vague and indistinct notions of the propositions he would wish to impress upon his readers, and frequently to bewilder himself in mazes which have confounded many a clearer head, and led them on

‘Through mire and standing pools to seek their ruin.’

We shall add a few more instances.

The distinction attempted at p. 79. between *aut* and *vel* is altogether unintelligible. If any two words be strictly synonymous, we conceive that these are so. Dr Hill might have remembered that Cæsar, in the same chapter, has the two following sentences: ‘Cæsar satis esse causæ arbitrabatur quare in eum, *aut* ipse animadverteret, *aut* civitatem animadvertere juberet;’ and ‘Petit atque hortatur, ut *vel* ipse de eo causâ cognita statuât, *vel* civitatem statuere jubeat.’

What shall we say of the consistency of the following observations: ‘*FERUS* always implies that the animal marked by it enjoys his liberty uncontrouled, and shows a disposition to prey upon others. This disposition is not the universal concomitant of the quality expressed by *ferus*,’ &c. Of *ferinus*, he makes

another synonyme; and informs us, that 'it denotes such qualities of wild beasts as relate to their mode of living, their flesh, their milk, and their cries.' He really does not seem to suspect that it is the common possessive adjective formed from *ferus*, in the same way as *caninus* from *canis*, *vitulinus* from *vitulus*, *equinus* from *equus*, &c.

The distinction between *Interea* and *Interim* appears to be palpably false, from the very instances that are quoted in support of it (p. 460.). It is not clear to us that *Interea* is plural; the long *a* in the close rather supports an opposite conclusion.

Pellere and *Trudere* are strangely confounded (p. 571.); the latter is said 'to differ from the former in implying that a greater impulse is requisite to drive the body receiving it from the point it occupies, and that the line of direction is limited.' To us it appears plain that the distinction is founded in very different considerations. In *trusion*, the moving body is supposed to follow in close contact with the body moved, and to continue its action on it; which does not take place in *pulsion*. In *pulsion*, again, it is always implied that the impelling body was in motion before it began to act upon the other, which is by no means necessary in the case of *trusion*.

Infittari is said (p. 537.) to signify a known violation of truth; and in confirmation of this, the author not only quotes but translates a passage in which it signifies to maintain the truth; the words are, 'Multi magis meluerunt falsum fatendo, quam infittando dolere.' The author is speaking of the effects of judicial torture.

In p. 757, we learn that *Via* may be 'applied to every part of the earth's surface that may be travelled over. He who formed a road where there was none before, was said 'Munire viam: the surface was of course a *via* before any thing was done to it.' This we conceive to be founded entirely on misconception. *Munire viam* signifies to *make* a way, just as *facere viam* does: it is of no consequence whether the general word be used, or a more specific one, describing the method of making. If Dr Hill's reasoning be tight, the phrases *plectere coronam*, or *torquere funem*, should imply that the flowers on the hemp were already entitled to the name of garlands and ropes before the operations described by these words were begun upon them.

Servus and *Verna* are said 'to differ according as the state of slavery is more or less oppressive; the latter is said to imply more comfort—the former to be consistent with greater dignity. This really appears to us to be perplexing a very plain distinction. *Servus*, we understand, is the generic term in which *Verna* is included; *Verna* is that species of *servus* who is reared in the

the family. The last quotation from Plantus is most perversely misinterpreted.

The only other instance we shall give of what we cannot help considering as very unaccountable negligence or inaccuracy in Dr Hill's performance, is his account of the terms *Usura* and *Fenus* as applied to the interest of money. To us it appears that these words have precisely the same meaning, though derived from different views of the subject. *Usura* is the rent or hire paid for the use of money; *Fenus*, derived, according to Festus and Varro, from the old verb *feo*, to produce, signifies the produce of the loan, and is equivalent to the Greek *τοκος*, a term appropriated under the same analogy. Dr Hill, however, is by no means satisfied with the simplicity of this statement. '*Usura*,' he says, 'is applicable to any rate of interest, whether moderate or oppressive; but *Fenus* carries in itself, without the addition of any term, a reference to a regulated interest.' p. 778. The vagueness of *Usura*, he adds, is limited by the epithets which are joined to it, and, when used along with *Fenus*, it always signifies something more oppressive. It might be sufficient, perhaps, to observe, that there is no foundation whatsoever for this distinction, and that its fallacy is completely established by the passages which Dr Hill quotes in support of it. But there is something so extraordinary in the use which the learned author has made of his proofs, that it is worth while to attend to them a little more particularly. To prove that *Usura* is the more general term, and that it signifies something more oppressive than *Fenus*, he quotes these words from Suetonius, '*Pecunias levioribus usuris mutuati*;' and there he stops. Is it possible that Dr Hill did not know that the remaining clause of the sentence is '*graviore favore collocassent*?'—which is in direct contradiction to the whole of his theory. He is afterwards pleased to refer, in proof of his position that *Fenus* always relates to a regulated interest, to this line of Horace,

'Dives agris, dives positus in fœnore nummis.'

And adds, 'this person had laid his money out at interest, and, we are led to suppose, received in return for it neither more nor less than what was usually given.' Here, again, we find it difficult to conceive how Dr Hill should have forgotten that this very line forms part of the character of an usurer, who is represented as lending his money to young heirs, &c. at the exorbitant interest of *sixty per cent.*, and making them pay even this in advance; and whose character appears to have been so far removed from any thing that was usual, that the poet closes it by saying,

Maximè quis non
Jupiter! exclamat simul atque audivit? *Sat. I. 2. 12.*

As to the rest, we find Cicero applying the epithets of *magnum*, *grave*, and *iniquissimum*, to *Fenus*; and in a passage quoted by Dr Hill himself it is termed *avidum*. Indeed, he reasons about it till he comes to this oracular conclusion, 'that the term *Fenus* supposes the possible existence of a *certain latitude*; but *not in the degree* in which it exists in *Usura*, from which the idea of a limitation on either side of a standard is banished.'

In the course of his speculations on these words, the learned author is led, almost for the only time in the whole work, to favour his readers with some discussion on the usages and institutions of the people whose language he is explaining, and enters at some length into an account of the rates of interest established among the Romans, and of the terms employed to express them. After some preliminary remarks, he observes,

'*Centesima*, which in calculations of this kind was the integral number, by being doubled, expressed a fraction that was precisely the half of its own amount. Thus, the tax imposed upon Cappadocia, at the rate of twelve per cent., was reduced to six by the emperor Tiberius. "Levare vectigil centesimæ et ducentessimam statuit."

What sort of integral number that must be, which, upon being doubled, expressed a fraction of its own amount, we leave to our readers to conjecture; but it is evident, that here, and throughout the whole discussion, Dr Hill entirely overlooks the *rationale* of the terms he professes to interpret. The words *Centesima* or *Ducentesima*, do not in reality stand here in concord with *Usura* or *Vectigal*, with which Dr Hill connects them, but with the word *pars* understood. *Centesima usura*, therefore, ought not to be considered as a substantive and adjective, but as two substantives put together, like *urbs Roma*, *Cicero orator*: and the meaning is, that the hundredth part of the capital was paid monthly as interest—*Centesima pars sortis, usura*. If *Centesima* signified the hundredth part, however, there is no difficulty in perceiving that *Ducentesima*, which signified the two hundredth part, implied an interest one half lighter, without supposing that an integral number became a fraction of itself by being doubled. Finally, as if it were predestined that no part of this discussion should be free from blunder, it may be remarked, that there is no allusion, in the passage quoted from Tacitus, to any tax of 12 per cent. imposed on Cappadocia, and reduced by Tiberius to six: all that the historian says, is, that by reducing Cappadocia to a province, the emperor was enabled, by this increase of revenue, to reduce the tax of the hundredth penny, formerly levied upon sales all over the empire, to the two hundredth. These observations are minute, we confess, and may probably appear tedious to the reader; but a collection of synonyms contains no general doctrine, and must be judged of according

according to the accuracy which prevails in those minute discussions of which it must be composed.

If our readers are desirous of seeing further proofs of the load of superfluous matter with which this work is incumbered, we will refer them to the six pages which are taken up in stating the different meanings of *Æqualis*, *Par* and *Similis*, or rather in stating that these words

—‘agree in denoting certain distinct relations by which separate substances may be allied.’

It still remains for us to take some notice of that part of the work which the author is pleased to term the ‘*Philosophy of Prepositions* :’ this indeed seems his darling topic ; it is here that he has shrouded himself under the most impenetrable veil of mystery ; and hence he would send forth his dictates as oracles to the unenlightened inquirers after truth. After much investigation, however, we are under the necessity of remarking, that the observation of an eminent French writer is applicable to this, as well as to other parts of the work under our consideration.

‘*Tout ce que varie, tout ce que se charge de termes douteux et envelopés, a toujours paru suspect, et non seulement frauduleux mais absolument faux—parcequ’il marque un embarras que la vérité ne connoit pas.*’

His plan seems to be, to collect a number of passages from the Latin classics, in which the preposition under consideration is used, and, from an investigation of all these, to deduce and class in order the different significations he supposes it to be capable of bearing,—and to conclude by pointing out and illustrating, by similar examples, the force and power he conceives it to have in composition.

To take the first, *a*, *ab*, *abs*.—On the *philosophy* of these words he has favoured us with nearly twelve quarto pages. After two of frivolous and irrelevant matter (in the course of which he completely confounds in several passages the meaning of *ab* with that of *propè*) he makes this singular observation : ‘These prepositions *a*, *ab* and *abs*, have in themselves the power of denoting nearness ;’ and, among other examples adduced to prove this, he gives this one from Cicero’s *Epistles*, viz.

‘*Pleraque Epistolæ mihi nuntiabant ubi esses quod erant abs te.*’
Cic. Ep. Att. 4. 16.

And then observes,

—‘If we abstract the notion of vicinity from the preposition, the above sentence would be void of meaning.’

It must be clear, we think, to every unprejudiced person, that *abs* is used here in its ordinary signification ; i. e. it points out simply distance or separation, however small ; and instead of denoting

noting *nearness*, it marks the division which must necessarily exist between a thing and that from which it proceeds. It is obvious that the idea of *vicinity* which Dr Hill would affix to *abs* in the above passage from Cicero, would totally destroy the meaning of it: it implies distance, because the letters proceeded from a person who was absent. The learned professor has evidently attempted to establish many of his deductions on the principles of *quiescence* and *motion* as laid down by the author of *Hermes*. (*Herm.* p. 261.) In attempting this, he has naturally enough fallen into the same errors as Mr Harris; that is to say, he has almost invariably given to the preposition the meaning of some other word in the sentence. It was a similar mistake that led Dr Johnson and Greenwood into all their errors on this subject; errors which we supposed to have been long ago exploded by the learned author of *Επεξήγησις*.

Proceeding however on these grounds, Dr Hill has deduced only 10 (for in *ad* he has discovered 10) different meanings for *a*, *ab* and *abs*. We will not trespass on our readers by enumerating them, because we are of opinion that these prepositions have always one clear, distinct and definite meaning.

From our author's method of treating the simple prepositions, it will be easy to trace all those extraordinary mistakes he has made, when he proceeds to consider them in their compound state. Hence we were not surprised at his translating *abnegare* 'to deny with positive keenness,' or at his giving a wrong construction to *absumis* and *abstergere*. In all of these words, the original power of *ab* is sufficiently obvious. Hence too he embarrasses himself, and completely misse his object, when he attempts to mark the difference between *abdere*, *abscondere* and *conderere*, and between *abnormis* and *enormis*, &c. &c.

From what we have now said, our readers will probably be able to form a pretty correct idea of what we consider as most reprehensible in the execution of this work. But though we have been induced to express our disapprobation at sufficient length, we would not be understood as wishing to deny that the book has very considerable merit. The author is certainly entitled to much credit for the great labour which he has evidently bestowed upon the subject; and though his unfortunate predilection for that sort of metaphysical discussion, for which he does not seem eminently qualified, has frequently led him away from the plain path of his duty, it must be admitted that as often as he has been enabled to resist this seduction, he has displayed very considerable sagacity and acuteness, and manifested a familiar acquaintance with the most important passages of the best classical

classical authors. He deserves great praise, also, for having on every occasion consulted the works of Cicero, and for having lost no opportunity of setting before his readers any of the philological distinctions of that great writer, which were in any way applicable to the subject under discussion.

We should have great pleasure in laying before our readers some specimens of Dr. Hill's more successful exertions; but our limits will no longer admit of a considerable extract. We give the following as the most concise that presents itself.

'ELOQUENS, DISERTUS—agree, in denoting the power of uttering animated conceptions, by means of speech, but differ, in respect to the degree in which that power is possessed. The first term, from *eloqui*, implies the perfection of that art by which human thought is communicated. It supposes that the idea is accurately formed, and that the expression is so precise, as to state it exactly as it is. Mr Pope's definition of a person to whom *eloquens* is applicable, is a happy one,

'Fit words attended on his weighty sense.'

'Is erit *eloquens*, qui ad id quodcumque docebit, poterit accommodare orationem; qui parva submisce, modica temperate, magna graviter dicere potest.' Cic. *Orat.* 208.—'Nihil aliud est eloquentia quam copiose loquens sapientia.' Cic. *Part. Orat.* 236.

'Disertus comes from *disserere*, which, properly, denotes the act of separating different seeds, and sowing each in its proper place. 'Ut olivæ dissērit in areas suas cujusque generis res, sic in oratione qui facit, disertus.' VAR. *L. L.* 5. 7.—The native power of this verb appears in such a sentence as the following, from Columella. 'Baccas lauri et myrti, cæterorumque viridum semina in areolas dissērare.' 11. 2. 30.—This derivative adjective, *disertus*, denotes a degree of ability, in the use of speech, superior to what is generally met with, but inferior to that suggested by *eloquens*. The following definition, from Cicero, is decisive as to both terms. 'Celer tuus disertus est magis quam sapiens. Disertos me cognosce nonnullos scripsi, eloquentem adhuc neminem: quod eum statuebam disertum, qui posset satis acute atque dilucide apud mediocres homines excommuni quadam hominum opinione dicere: eloquentem vero qui mirabilius et magnificentius augere posset, atque ornare quæ vellet, omnesque omnium rerum, quæ ad dicendum pertinerent fontes, animo ac memoria contineret.' *Ep. ad Att.* 10. 1.—'Disertis satis putat, dicere quæ oporteat; ornate autem dicere proprium est eloquentissimi.' QUINT. in *Proam.* 8.

'In causa facili cuivis licet esse diserto.' OVID. *Trist.* 11. 21.

We may add the following elegant and happily chosen illustration of the meanings of *velle*, *cupere* and *optare*.

'Quid facias quæris? quæras hoc scilicet ipsum;

Invenies, vere si reperire "voles."

"Velle" parum est: "cupias," ut re potiarer, oportet;

Et faciat somnos hæc tibi cura breves.

"Velle"

“Velle” reor multos. Quis enim mihi tam sit iniquus
 Optet ut exilium pace carere meum?
 Pectore te toto cunctisque incumbere nervis,
 Et niti pro me nocte dieque decet.’

OID. *Ep. ex Ponto*, 3. 1. 33.

Upon the whole, though this work indicates extensive reading, and very considerable acuteness, we cannot say that it is executed with judgment, or likely to be eminently useful. It is liable to great objections for its omissions; and to still greater for its redundancies. An ambitious display of philosophical subtlety has placed the work altogether beyond the comprehension of a learner; and the merit of these extraneous discussions is rarely such as to attract the attention of a scholar. The work is printed with great neatness, and with very tolerable correctness, except in the Greek quotations, in which the accents are either omitted or inserted partially.

ART. XVII. *A Concise Statement of the Question regarding the Abolition of the Slave Trade.* Third Edition. 8vo. pp. 108. Hachard, &c. London. 1804.

THIS little publication is understood to contain an authentic statement of the grounds upon which the parliamentary advocates for the abolition of the slave trade have avowedly rested their cause; and has been generally received as the official manifesto of those by whom the discussion of this great question has been recently promoted. Though we do not usually indulge ourselves in any observations on those measures of practical policy that are immediately under the consideration of the Legislature, we flatter ourselves that we shall not incur any very weighty censure for presenting our readers with some account of this interesting performance. The fate which the question has repeatedly experienced proves but too clearly, that it has no connexion with party divisions or points of constitutional principle; and its importance is such, as may probably excite the attention of those who feel very little interest in the dissolution of a parliament, or the downfall of an administration. It is a question, indeed, upon the decision of which we cannot help thinking that mightier and more extensive consequences depend, than were ever suspended before upon the deliberations of any human assembly: it is a question in which interest, or an apprehension of interest, is more nakedly and daringly opposed to humanity and justice, than in any other case with which we are acquainted; and it is the only question we remember to have heard of, in which an admitted wrong has been publicly defended, without any allegation of state necessity.

It

It is wisely provided, that we should be but slightly affected with the fortunes of those who are little connected with us, and that the miseries of a remote quarter of the world should concern us less than the discomfort of our parish at home. But the closest connexion that man can have with misery, is, to be the cause of it; and in every case but this, a much smaller violation of justice has uniformly excited, even against a remote offender, a sentiment of more decided reprobation. If a tyrannical government sacrifices a few thousands of its subjects in a fantastic quarrel—if an Emperor Paul, or an Emperor Napoleon, transport a few hundreds to Siberia or Cayenne—if an Algerine carry off some scores of Christians into captivity, all Europe resounds with indignation, and prepares itself for vengeance; while we listen calmly to the defence of a traffic which condemns a whole quarter of the world to unceasing and ferocious warfare,—which annually exterminates more men than fall during the bloodiest campaign of European hostility, and regularly transports, every six months, in circumstances of unparalleled affliction, more innocent persons than suffer in a century from the oppression of all the tyrannies in the world. Such a subject, we apprehend, is level to every comprehension, and must excite an interest in all who can be brought to attend to the statements in which it is involved. Extensively as we have reason to believe this little volume has already circulated, we feel it therefore to be our duty to contribute to its farther notoriety, and to engage as many of our readers as possible in the consideration of a question, to which we conceive that no one can be indifferent who is not utterly inattentive.

It is scarcely necessary to premise, that the advocates for the abolition of the slave trade most cordially reprobate all idea of *emancipating* the slaves that are already in our plantations. Such a scheme, indeed, is sufficiently answered by the story of the galley-slaves in Don Quixote, and, we are persuaded, never had any place in the minds of those enlightened and judicious persons who have contended for the abolition with so much meritorious perseverance. In this pamphlet, accordingly, we find none of that sentimental rant and sonorous philanthropy by which the cause of humanity has been so often exposed to ridicule. The argument, on the contrary, is conducted with the greatest moderation, sobriety and good sense; the author is master not only of his subject but of his temper; and his antagonists will seldom have an opportunity either to triumph in the inaccuracy of his statements, or to complain of the manner in which they are delivered. But though this author has prudently declined the use of that warm and pathetic eloquence that is apt to give a romantic and theatrical air to a grave and important discussion, he is too wise to consider this as a question of expediency alone, or to argue as if it were to be decided

cided by a balance of profit and loss. He has taken the moral elements also into his calculation; and, assuming that it is unjustifiable to deprive human beings of life, liberty or happiness, without some unequivocal necessity, he has examined, in detail, the motives which the friends of this traffic have urged for its continuance, and weighed against each other the good and the evil that will respectively follow on its cessation.

It is the basis of this argument, that the slave trade occasions some misery; and its object is to show, that this misery is not compensated by any of the advantages which it produces. The basis, we should think, might have been very safely assumed: but as persons have been found who maintain that the slave trade actually conduces very much to the happiness and comfort of the Africans, our author scrupulously begins with a short exposition of the sufferings it inflicts on that unfortunate race—in their native country—on the middle passage—and after their arrival in our colonies.

From Africa it is certain that they are carried off against their will, and most frequently in all the agonies of the most poignant affliction. This is not denied: but it is said that they consist of captives who would otherwise be slain, or criminals condemned by courts of justice. The answer is, and it is proved beyond all possibility of contradiction, that wars are now undertaken, incessantly, for the express purpose of procuring slaves for the market, and that since the establishment of this traffic, every crime is punished by selling the offender to a dealer:—accusations of witchcraft or adultery are always at hand to insure a supply to the traders on the coast; and if these fail, it is admitted that, by advancing a little brandy or gunpowder to the natives, a whole village may be *legally* carried off in satisfaction of the debt.

The horrors of the middle passage need not be described. To say nothing of the mental agony implied in this forcible separation from their friends and their country, it is quite enough to mention, that upon an average no less than seventeen in the hundred die before they are landed; and that there is a farther loss of thirty-three in the seasoning, arising chiefly from diseases contracted during the voyage. One half of the victims of this trade perish therefore in the rude operation of transplanting them; and probably not less than fifty thousand men are cut off thus miserably, every year, without taking into account the multitudes that are slaughtered in the wars to which this traffic gives occasion, and the numbers that must perish more gradually by being thus deprived of their parents or protectors.

Of their situation in the West Indies, few that desire to be informed need now be ignorant. They are *driven* at work, like a team of horses

horses or a yoke of oxen, by the terror of the whip. No breathing time or pause of languor is allowed: they must work, as cattle draw, altogether, and keep time exactly in all the movements which their drivers enjoin. Of the infelicity of this condition, some estimate may be formed from the precautions that are necessary to withhold them from suicide, and from the insurrections which no precautions can ever long avert. After urging these considerations, and making a distinct reference to the authorities upon which they are founded, the author maintains that the friends of the abolition have undoubtedly made out their case.

‘For, if what is most improperly denominated a trade appears clearly to be a national crime, can any thing be urged in its defence upon grounds of expediency? Do we vindicate an act of violence; a cruel, mercenary murder, for example, by proving that it has been profitable? If the wages of national guilt are a sufficient vindication of it, let us at least not lose the benefits of this golden maxim; let us be consistent with ourselves, and employ our navy in a general system of piracy upon all the lesser powers of Europe.—Or if we are afraid of them, let us enrich ourselves at the expence of those insignificant states in Asia, and the north of Africa, who send any vessels to sea. The advantages of such a scheme are infinitely more undeniable than any that have ever been ascribed to the slave trade by its warmest advocates; and the guilt of the transaction would be less, in the proportion of robbery to torture and murder.’ p. 31, 32.

Though we are ourselves very much inclined to rest in this conclusion, yet, in order to show how very little temptation there is to persist in a practice so indefensible, the author proceeds to consider the amount of those reasons of expediency which are pleaded in apology of its continuance. These he considers, either as they relate to those by whom the trade is carried on, or to the state of the West Indian colonies.

The first plea that is maintained by the traders, is, that a great capital has been invested in this branch of commerce under the sanction of the Legislature; and that the abolition, by throwing it out of employment, would occasion serious loss or inconvenience to its holders. To this it might be answered, in the first place, that a sufficient warning was given to such persons, when, in 1792, it was resolved by the House of Commons, that the trade should cease in 1796. But the author of the work before us, takes up the question on a much broader and more indisputable ground. He shews that the whole capital annually vested in this trade amounts, at a large calculation, to very little more than one million, while the whole annual exports of the country amount to no less than forty millions; and he asks if it be possible to conceive that any serious inconvenience would

would be produced by throwing *one fortieth part* of our capital out of a particular employment, and compelling it to seek for another. In a country like this, he observes, it is always easy to find employment for a much larger increase of capital than this; and mentions as an instance, that in 1800 the exports of Great Britain were more considerable by very nearly *twelve millions* than they were in 1796; and yet employment was found immediately, and without the least difficulty, for all that prodigious mass of additional capital. At the commencement of almost every war, he observes, a much larger quantity of stock is necessarily thrown out of employment than will be driven into new channels by the abolition of the slave trade; and though the nation has certainly suffered occasional inconvenience from that circumstance, it has never been thought a sufficient reason for our remaining at peace, when we were called to arms by a sense of national dignity, or national faith and reputation. In all such wars, too, there is a direct waste of blood and of treasure; but here, where dignity and justice make the loudest appeal, there is neither hazard nor expence, nor any thing whatever to be dreaded, but the risk of this trifling displacement of a capital that can easily invest itself in more beneficial employment.

Another popular plea has been, that this trade is a valuable nursery for our seamen. When the facts are attended to, our readers will probably be surprised that such a proposition should ever have been hazarded. The trade employs only about one sixtieth part of our tonnage, and less than one twenty-third part of our seamen: But the most important fact is, that such is the unhealthiness of this baneful traffic, that it appears from the muster-rolls of Liverpool and Bristol, that out of 12,263 persons, not *less than 2643 are lost in a year*; something more, that is, than one sixth part of the whole, and nearly *ten times* as many as perish out of the same number in the West Indian trade, which was formerly looked upon as the most unwholesome branch of our commerce. If any estimation be put upon the lives of the useful men thus lost to their country, it will appear that besides operating as a fatal drain to our naval strength, this traffic actually impoverishes the country in a much greater proportion than its remote consequences can enrich it.

With regard to the West Indian colonies, the first and the most usual argument for the continuation of the trade is, that it is necessary for keeping up that stock of negroes, without which the plantations cannot be cultivated. Now, here the author most justly remarks, that this statement must either be false, or the slaves must necessarily be treated with all that inhumanity, at the imputation of which the friends of this system are so excessively indignant.

indignant. Men, especially men for whose labours there is a demand, will multiply and increase, it is well known, in every generation, unless their numbers be reduced by ill treatment, accident or disease. If the stock of negroes therefore cannot be kept up by breeding, without importation, it is indisputable that this can only be owing to the obstacles that are thrown in the way of their multiplication by the cruelty of their overseers; and the abolition of the trade would necessarily produce such an amelioration of their treatment, as would enable them at least to continue their present numbers. But the author shows, in the second place, from documents furnished by the colonial governments of Barbadoes and Jamaica, that, in these two islands at least, the stock of negroes has been uniformly maintained, by breeding, since 1774, and that the importation has gone altogether to increase the amount of that stock, and to extend the cultivation of the islands.

From these facts the author infers, that the only substantial ground upon which the West Indian planters can rest their defence of this trade, is that which has lately been urged for them, though with more evident embarrassment than any of the former topics, viz. that without an importation of negroes the *new* plantations could not be brought into profitable cultivation, nor the limits of our old ones very rapidly extended. Now, though the truth of this statement may be admitted, we presume it will not be seriously argued, that all the miseries of this traffic should be perpetuated, only that a few individuals may not be disappointed in making that addition to their riches which the prospect of its continuance may have led them to expect. The cessation of the trade will not take a farthing from any man; it will not put a single cane-piece out of cultivation; nay, it will add to the value of all that are now in existence: But it will give some check to the rapidity of their multiplication, and disappoint a few avaricious speculators of the profits they had reckoned upon making in their new plantations. It is impossible, we conceive, that a hardship of this nature should ever enter into competition with all the guilt and the misery, at the expence of which alone it can be averted. If a practice be admitted to be criminal, and it be proposed to make a law for its suppression, it is surely enough if those who have profited by it are rendered secure in their acquisitions: it would be too much to provide an indemnity for all who might have hoped to make gain by its continuance. But the force of this consideration is still farther weakened, by recollecting, that this projected improvement and extension of our colonies will not be by any means defeated, but only a little delayed, by the abolition of the slave trade. It has been proved, that the negroes actually keep up their present numbers, even under the negligent

and cruel treatment which they occasionally meet with. If the planters were made to depend entirely upon their natural multiplication, it is not to be doubted that their numbers would be very rapidly increased. The chief obstacles to their multiplication, at present, are the small proportion of females among the imported slaves, the contagious diseases brought by them from Africa, or contracted on the passage, and the hard treatment they too frequently meet with. The two first of these obstacles would disappear before one generation was extinguished; and the latter would be removed from the moment that it became impossible to replace a disabled slave by purchase. The expansive force of population, relieved from the pressure of these cruel obstacles, and stimulated by the extraordinary demand for additional labourers, would speedily extend the black population of our colonies over every region to which the commercial enterprise of the planters might direct it, and enable them, in the course of twenty or thirty years, to accomplish, with security and comfort, what they might now perhaps effect in ten or twelve, at the expence of inexpressible cruelty and incalculable danger.

In the part of this work which we have now abstracted, the author has applied himself strictly to appreciate the value of those views of expediency, upon which the defenders of this traffic have usually pretended that it might be justified. He proceeds, in the last place, to show, not only that the system to which it is subservient is more ruinously expensive than any other, but that the continuance of it must endanger the very existence of our West Indian possessions. By the introduction of task-work, and such other ameliorations in the condition of the slaves as may be consistent with the security of their masters, he lays it down, in the first place, that their labour will become more productive; and refers, not only to the authority of all general reasoners on the subject, but to a report of the assembly of Grenada, the terms of which are too striking to be omitted. In answer to certain queries of a parliamentary committee, those planters report, that out of crop time it is customary to allow the negroes one afternoon in every week to themselves:

‘And it is to be observed, that although the negroes are allowed the afternoon only of a day in every week, yet *a negro will do as much work in that afternoon, when employed for his own benefit, as in a whole day, when employed in his master’s service.*’ p. 56.

With regard to the other point, it is proved, not only by general reasonings, but by an unanswerable appeal to facts, that insurrections are always produced by the concurrence of two causes—the bad treatment of the slaves—and a rapid importation of new negroes, the pride and ferocity of whose spirits have not been subdued

subdued by the habit and example of submissive servitude. In these circumstances it is not a little alarming to consider with what a progressive rapidity our annual importations have been lately increased; and it is obvious, that, under the present system, the faster the slaves multiply, the more rigid their treatment must become. In any situation of the Antilles, such a state of things might well be contemplated with solicitude and apprehension, and might fairly be said to be approaching to a crisis, the event of which it is not easy to contemplate with composure. But the issue of the late contest in St Domingo has brought this crisis much nearer, and exhibited a more lively picture of the horrors with which it may be terminated.

‘ In the middle of the slave colonies, almost within the visible horizon of our largest island, a commonwealth of savage Africans is at this moment established, inspired with irreconcilable enmity to all that bears the name of negro bondage, and a rooted horror of that subordinate state which their efforts have enabled them to shake off. Does any one imagine that the slaves of Jamaica are ignorant of the proud superiority of their free brethren on the opposite shore? Is it probable that they now kiss, with more devotion than ever, the chains which their fellow slaves in the next settlement have triumphantly broken? Admitting that our colonies are safe from the risk of being attacked by the new negro power,—an attack which in all probability would be joined by every discontented, and every newly imported slave—is not the constant example of the neighbouring island a sufficient reason for deprecating, beyond every thing, the maltreatment of slaves, the disproportion of whites, the increase of unseasoned negroes, which are the necessary consequences of continuing the African trade? When the enemy’s forces are besieging you, is it prudent to excite mutiny in your garrison, and to admit into the heart of your fortress the best allies that your enemy has?—When the fire is raging to windward, is it the proper time for stirring up every thing that is combustible in your warehouses, and throwing into them new loads of materials still more prone to explosion? Surely, surely, these most obvious considerations need but be hinted at, to demonstrate, that, independent of every other argument against the negro traffic, the present state of the French West Indies renders the idea of continuing its existence for another hour worse than insanity. Were there not another objection to the commerce, the revolution of St Domingo is enough, both as a sad monument of its fatal tendency, and as an event which has unfortunately changed the very nature of the case; aggravating, a thousand fold, every danger where-with the system was originally pregnant. The planters have now to chuse between the surrender of the slave trade and the sacrifice of their possessions—between the civilization of Africa, and the lasting barbarism of the West Indies—between the peaceful improvement of the negroes in their own country, and the masterful domination of savage men in the American islands—between the immediate total abolition of the

slave trade, and the abolition of that slavery which alone can preserve the existence of white men in the Charaibbean sea. That there is no other alternative, the late history of the West Indies proves in every page.

In an appendix to this argumentative and masterly tract, the author considers the comparative merits of an immediate or a gradual abolition, and gives his opinion decidedly in favour of the former. A gradual abolition, he observes, can only mean, either that the trade shall cease altogether after a certain period, or that its extent shall be gradually diminished from the present moment, till at last it decline into nothing. With regard to the first project, he judiciously observes—

‘The interval will be employed by the African traders in drawing millions from the other branches of commerce, to pour them into the negro traffic, and in manning every vessel that can keep the sea, with sailors, swept from the wholesome lines of navigation, and hurried into the most pestilential of all employments. The demand for slaves suddenly increased, can only be answered by a frightful aggravation of all the miseries to which Africa has been doomed by her communication with Europe. The eagerness of our traders to profit by the interval, will urge them to commit new breaches of the slave carrying act, and to augment incalculably the deplorable cruelties of the middle passage. But what will be the consequence of this sudden accumulation of new slaves in the West Indies? What to this was the paltry increase of new hands previous to 1789, which brought about the dreadful revolution of St Domingo! How well is it for those who shudder at the prospect of the immediate abolition, because it is a sudden innovation, to embrace a project the most full of change—the most pregnant with violent alteration—the most certainly prolific in wide spreading revolution or any that the imagination can paint? Sudden innovation is indeed to be dreaded at all times, and in every state; but in no era, and in no region so much, as in the first year of the independence of Hayti—in the slave colonies which almost touch the shores of Guadaloupe and St Domingo.’ p. 83, 84.

With regard to the second plan, of gradually diminishing the numbers allowed to be imported, he observes, that it would be utterly impossible to determine what traders or what colonies should have the preference in this limited traffic, or to counteract, by any regulations, the prevalence of a contraband trade; and, in general, he suggests, that the question is now agitated during a great crisis of our West Indian colonies, and that nothing but decisive measures can save them from the dangers to which the improvidence of commercial avarice has already exposed them.

The last argument to which he directs his attention, is that which is most frequently in the mouths of superficial disputants, though it admits all the iniquity, and much of the impolicy of the

the traffic; it is, that the abolition of the slave trade is impracticable, because slaves will be smuggled in spite of every prohibition, and because, if we were to renounce the traffic; it would be taken up by other nations. With regard to the danger of smuggling, it is enough perhaps to observe, in the words of the author before us,

‘It is evident that no contraband article is so easily detected as a cargo of men, differing from their crew in every obvious particular, and imprisoned in all parts of the vessel against their will; nor can any commodity be so difficult to smuggle into a country as new slaves, kept in subjection by main force.’ p. 88.

As to the other objection, we will acknowledge that we have never been able to see in what manner it could apply to the question now under consideration. If we are determined to abjure this cruel trade, from our regard to justice and our fears for our own security, of what consequence is it, whether other nations have the virtue or the prudence to follow our example? Their perseverance in what we know to be iniquitous and full of danger, can be no reason for our not leaving it. Our example may draw them after us; but theirs can never justify this our most perilous delinquency. If the Africans made slaves of our countrymen, there might be something intelligible in justifying our practice by theirs; but it is not easy to see why we should retaliate upon them all the wrongs that are committed by our European neighbours; and it is but an indifferent reason for continuing to torture and murder them, against our conscience and our interest, that other nations may perhaps persist in these outrages after we have abandoned them.

The abolition of the British slave trade will wash away from the reputation of this country the stain of this most infamous traffic. It will save the lives and the sufferings of thirty or forty thousand Africans annually imported into our dominions; it will ameliorate the condition of half a million more, who now languish in the bonds of the most deplorable servitude that ever humiliated the nature of man; and it will secure, if any thing can secure our invaluable possessions in the West Indies from that tremendous destiny with which they are so imminently threatened. If the advantages of the measure were to cease here, we think that its promoters would have matter enough for rejoicing and triumph. But, in the present situation of the European world, it seems evident that the abolition of the British trade would be equivalent to its total cessation, and that a stop might be put at once to that fruitful source of misery to all the natives of Africa. Neither France nor Holland can import a single negro during the sub-

sistence of the war, and we may seize, when we think proper, upon all the islands that remain to them. Denmark has long ago declared her willingness to abandon this trade; and the interest which Sweden has in its continuance is too trifling to engage her in a branch of commerce to which she has hitherto been a stranger. The importation of slaves is already prohibited all over America, except only in the state of South Carolina; and the trade is there subjected to very grievous discouragements. The Spanish and Portuguese settlements have always been supplied chiefly by breeding, and will most probably be determined, by the late events in St Domingo, to betake themselves altogether to that safer system, and to abandon a traffic in which they have less interest than any other colonial power, and which they must carry on to great disadvantage without our assistance. Every thing induces us, therefore, to put a stop to this desolating trade at a moment when our influence is so extensive. If it be once effectually abolished, we should have but little fear of its revival; the clamorous band of commercial adventurers would be dispersed into other departments; the experience of tranquillity would render the planters averse to the renewal of danger; and, after some years estrangement and disuse, we verily believe that men would feel something of the same compunction and horror at the idea of returning to that bloody market, which savages reclaimed from cannibalism are said to do at the recollection of their inhuman banquets.

It appears to us, in short, that the Parliament of England have it now in their power to do a more magnificent act of humanity and justice than was ever before in the gift of a legislative assembly; and that by this one law, they may, without injury to their country, deliver more men from suffering, and exert a far more lasting, extensive and beneficial influence on the fortunes of mankind, than by all the triumphant campaigns and successful negotiations of a century. To those who wish to be more particularly informed of the magnitude and the merits of this question we recommend the perusal of this very able summary, and of the authorities referred to by the author.

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